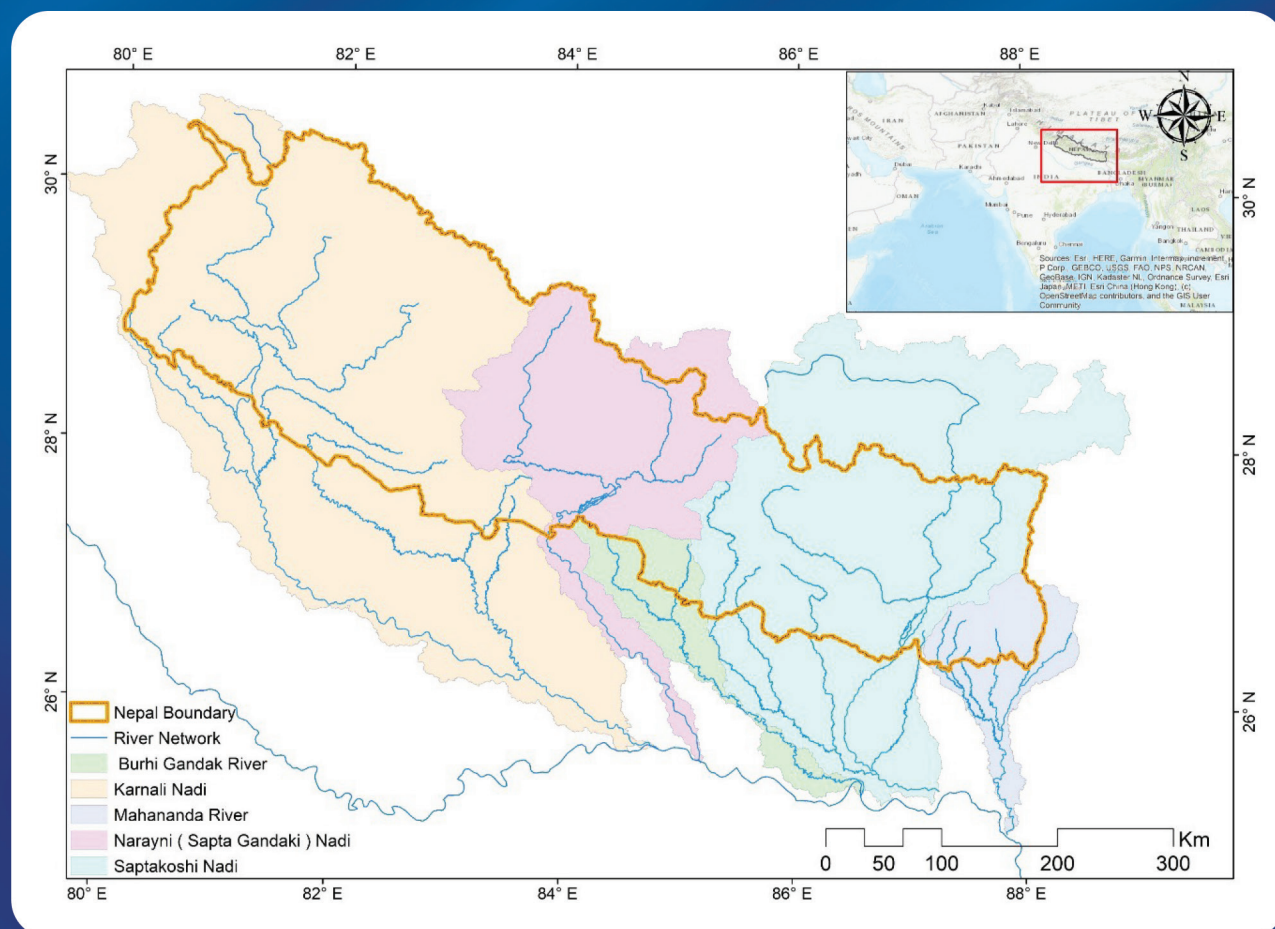




Government of Nepal
Ministry of Forests and Environment
Department of Forests and Soil Conservation

Watershed Atlas of NEPAL

Classification Standardization



December 2025

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Disclaimer

The purpose is to develop criteria for classifying hydrological units in Nepal, and define nomenclature and coding for different types of hydrological units. Maps of hydrological units are presented to visualize their spatial extents but does not represent or provide reference to any political or administrative boundaries or any other purpose.

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GON/UNDP/GEF: Developing Climate Resilient Livelihood in Vulnerable Watersheds in Nepal

FOREWORDS



Government of Nepal

Ministry of Forests and Environment



Ref.No.

P.O.Box No.3987
Singha Durbar, Kathmandu

Date :-

FOREWORD

Nepal's landscapes, its rich biodiversity, and diverse ecological systems is fundamentally shaped by its river networks and watersheds. The delineation of hydrological boundaries that contribute to surface runoff is the first and most critical step in the effective management of ecosystems, biodiversity, watershed conservation, environmental planning, engineering interventions, and disaster risk reduction. Clear identification and standardization of these boundaries provide the foundation for sustainable and science-based natural resource management.

Given Nepal's complex topography, ranging from the Terai plains to the mid-hills and high Himalayas, the use of appropriate hydrological terminology, based on aerial extent, river origin, flow characteristics and outlet points is essential for planning and designing development projects and programs. There has been a strong need for a comprehensive and standardized digital database and map series depicting drainage basins, sub-basins, watersheds, and sub-watersheds across the country for many years.

In response to this need, the Department of Forests and Soil Conservation initiated the preparation of a detailed, GIS-based Watershed Atlas of Nepal. The Atlas presents hydrological unit maps developed on the basis of geographical settings, river characteristics, and drainage patterns. Organized in a hierarchical framework, the Atlas provides unique identification codes and standardized nomenclature for each hydrological unit, along with accurate spatial extent and geographic location. These features make the Atlas an important planning and management tool for water resources, forestry, engineering, environmental management, and other related sectors. The hydrological boundaries and classification system presented in this Atlas are expected to establish a common national understanding of watershed standardization and to promote the uniform use of hydrological nomenclature by government agencies, non-governmental organizations, and development partners engaged in natural resource management.

I commend the Department of Forests and Soil Conservation and the multisectoral and multidisciplinary teams for their dedication in producing this pioneering national resource. I am confident that this Watershed Atlas of Nepal will serve as a robust foundation for evidence-based planning, informed decision-making, and sustainable development initiatives across the country.

Madhav Prasad Chaulagain
Minister
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P.O.Box No.3987
Singha Durbar, Kathmandu

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FOREWORD

The delineation of a hydrological boundary contributing to the surface runoff is the first and the most important step for managing ecosystem, biodiversity, environmental, engineering, watershed conservation, and disaster risk reduction. The use of appropriate hydrological terminology based on aerial extent, origin and its outlets is also equally important while planning and designing any natural resource management projects and programs. The detailed digital database maps showing drainage basins, sub basins, watersheds and sub watersheds in the form of "Watershed Atlas" was felt need for many years. The Department of Forests and Soil Conservation took an initiative on this and made an effort to prepare detail hydrological unit maps based on geographical settings, river characteristics, and drainage patterns. These GIS based atlas, provide hierarchical data along with unique codes that can provide their appropriate nomenclature aerial extent, geographical locations and supposed to be an important management tool for water resources, forestry, engineering and other sectors. It is expected that these hydrological boundaries will be applicable to build common understanding on watershed standardization and classification and expected that nomenclature will be uniformly used by Government, and Non-Government organizations involved in natural resource management.

The atlas was prepared based on intensive consultation with other ministries and departments through a series of meetings. I would like to extend sincere thanks to Water and Energy Commission Secretariat, Ministry of Energy, Water Resource and Irrigation, Department of Hydrology and Meteorology, Institute of Engineering Pulchowk Campus for their valuable contribution to prepare this report.

I would like to express sincere thanks for Dharendra Kumar Pradhan, Director General, Department of Forests and Soil Conservation, Deputy Director General, Uddhaw Bahadur Ghimire, Dr. Prem Paudel, National Project Manager DCRL and UNDP Country Office Nepal for providing technical and financial support and Institute of Engineering Pulchowk Campus for their continuous efforts and necessary supports during the course of atlas preparation.

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Foreword

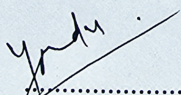
Nepal's remarkable physiographic diversity, ranging from the Terai plains to the mid-hills and the high Himalayas, has given rise to a wide variety of watershed systems with distinct hydrological characteristics. The morphology and behavior of river systems are influenced by factors such as drainage area, basin configuration, origin, and outlet conditions, underscoring the need for a systematic and standardized framework for their classification and nomenclature.

In this context, the Department of Forests and Soil Conservation, in collaboration with sectoral ministries and stakeholders, has developed the *Watershed Atlas of Nepal*. Grounded in nationally and internationally accepted principles, the atlas provides a coherent framework for the hierarchical classification of river systems into basins, sub-basins, and watersheds, supported by a structured coding system and key attributes. It is expected that the standardized nomenclature presented herein will be adopted uniformly across institutions, thereby promoting consistency and a shared technical understanding within the sector.

As a pioneering national effort, this atlas marks an important step toward standardizing watershed and river system nomenclature in Nepal. While every effort has been made to ensure technical rigor and consistency, the Department remains committed to its continuous refinement through application and stakeholder engagement.

I extend my sincere appreciation to all experts and institutions who contributed to this effort. I also acknowledge the technical and financial support provided by the *Developing Climate Resilient Livelihoods Project/UNDP*, in partnership with the Institute of Engineering, Pulchowk Campus. Special appreciation to Deputy Director General/ National Project Director Mr. Uddhaw Bahadur Ghimire, DDG Dhananjay Lamichane, Under Secretary Ms. Sumana Devkota, SCO Mr. Sudip Khadka, NPM Dr. Prem Prasad Paudel, and Prof. Dr. Vishnu Prasad Pandey for their leadership and coordination.

I am confident that this atlas will serve as a valuable reference for planning, research, and sustainable watershed management in Nepal.


.....
Dharendra Kumar Pradhan
Director General



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Kathmandu, Nepal

Foreword

The sustainable management of Nepal's watersheds is to safeguarding the nation's ecological integrity, water security, and the livelihoods of millions who depend directly on natural resources. The publication of the Watershed Atlas of Nepal marks an important milestone in strengthening scientific understanding and institutional capacity to manage Nepal's diverse landscapes, from the High Himalayas to the plain lands in Terai, through an integrated, evidence-based approach. The National Basin Management Strategy 2023 identifies the watershed atlas as a key resource for both short-and long-term management planning, particularly for mitigating climate change-induced disasters through the characterization and prioritization of watershed areas. In this context, the atlas provides a comprehensive and technically robust compilation of watershed characteristics, hydrological patterns, and land-use dynamics across the country.

This work was carried out under the leadership of the Department of Forests and Soil Conservation (DoFSC) as part of the Developing Climate Resilient Livelihoods in Vulnerable Watershed in Nepal (DCRL) project. This publication was possible through strong collaboration among technical experts, field practitioners, and partner institutions. The key government institutions-including the Water and Energy Commission Secretariat (WECS), the Department of Irrigation and Water Resources, and the Department of Hydrology and Meteorology have provided extensive guidance throughout the process.

The integration of remote sensing, GIS technologies, and field-based validation ensures that the information presented is reliable and relevant for4 planning, policy formulation, and implementation. This atlas intends to serve as an important reference for policy makers, planners, researchers, and development partners working in watershed management, water resource engineering, disaster risk reduction, climate adaptation, and sustainable land-use planning. It is expected to contribute to informed decision-making and promote coordinated action across sectors and administrative levels.

To address inconsistencies in the classification and naming of hydrological units (HUs) in Nepal, the report reviews global practices and previous efforts in Nepal and proposes a unified classification and naming system. The proposed framework identifies 1290 hydrological units, categorized into 11 basins, 28 sub-basins, 71 watersheds, and 1180 sub-watersheds, with maps and statistics presented up to four river levels. The criteria were developed through extensive expert consultation.

Nevertheless, I would like to extend my sincere appreciation to all individuals and organizations involved in the preparation of this atlas. In particular, I acknowledge the Institute of Engineering for their technical support and the DCRL project and the UNDP Country Office for their financial contributions. Their dedication and collaboration have been instrumental in bringing this publication to success.

The Department of Forests and Soil Conservation remains committed to promoting resilient watersheds and sustainable ecosystems for present and future generations. I am confident that the Watershed Atlas of Nepal will serve as valuable resource in advancing these shared objectives.

Uddhaw Bahadur Ghimire
Deputy Director General
Watershed and Landslide Division
Department of Forests and Soil Conservation

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ABBREVIATIONS AND ACRONYMS

AWRC	Australian Water Resources Council
CIS	Common Implementation Strategy
CWRS	Center for Water Resources Studies
DCRL	Developing Climate Resilient Livelihoods in the Vulnerable Watersheds in Nepal
DEM	Digital Elevation Model
DHM	Department of Hydrology and Meteorology
DoFSC	Department of Forest and Soil Conservation
DoS	Department of Survey
ERICA	European Rivers and Catchments
GDP	Gross Domestic Product
GHGs	Greenhouse Gases
GIS	Geographic Information System
GoN	Government of Nepal
HUCs	Hydrological Unit Codes
IoE/TU	Institute of Engineering, Tribhuvan University
LoA	Letter of Agreement
MHVRA	Multi-Hazard Vulnerability and Risk Assessment
MoEWRI	Ministry of Energy, Water Resources and Irrigation
NDC	Nationally Determined Contributions
SDI	Spatial Data Initiative
TAC	Technical Advisory Committee
UAV	Unmanned Aerial Vehicle
UNDP	United Nations Development Programme
USGS	US Geological Survey
WECS	Water and Energy Commission Secretariat
WFD	Water Framework Directive
WRIS	Water Resource Information System
WRRDC	Water Resources Research and Development Center

1. INTRODUCTION

1.1 Background

Developing watershed atlas using some classification and coding standards, is widely practiced globally. Water Resource Strategy (2002) and National Water Plan (2005) have emphasized holistic and integrated development of water resources sector at river basin scale, which may go beyond national boundary (see Figure 1-1). However, hydrological units (HUs) are being defined differently in different contexts. Department of Forests and Soil Conservation (DoFSC) is putting efforts in developing 'Watershed Atlas of Nepal' over the years. The latest one was developed in 2021 (DoFSC, 2021), with objective of developing finer topographically defined hydrological units and assigning a unique identifier code to each HU defined. The watershed delineation and coding system developed by DoFSC for Nepal was focused on watershed management and thus utilized alphanumeric code to identify hydrological units (DoFSC, 2021). The atlas used three level hierarchical division of HUs, namely, basin, sub-basin and watershed. These hierarchical levels were determined based on hydrologic system, physiographic zone, size of HUs, and watershed management practices of the country. A HU codification criterion was developed to identify each category of the HU which is referred as Watershed Code. A unique alphanumeric code of nine characters was assigned to each HU.

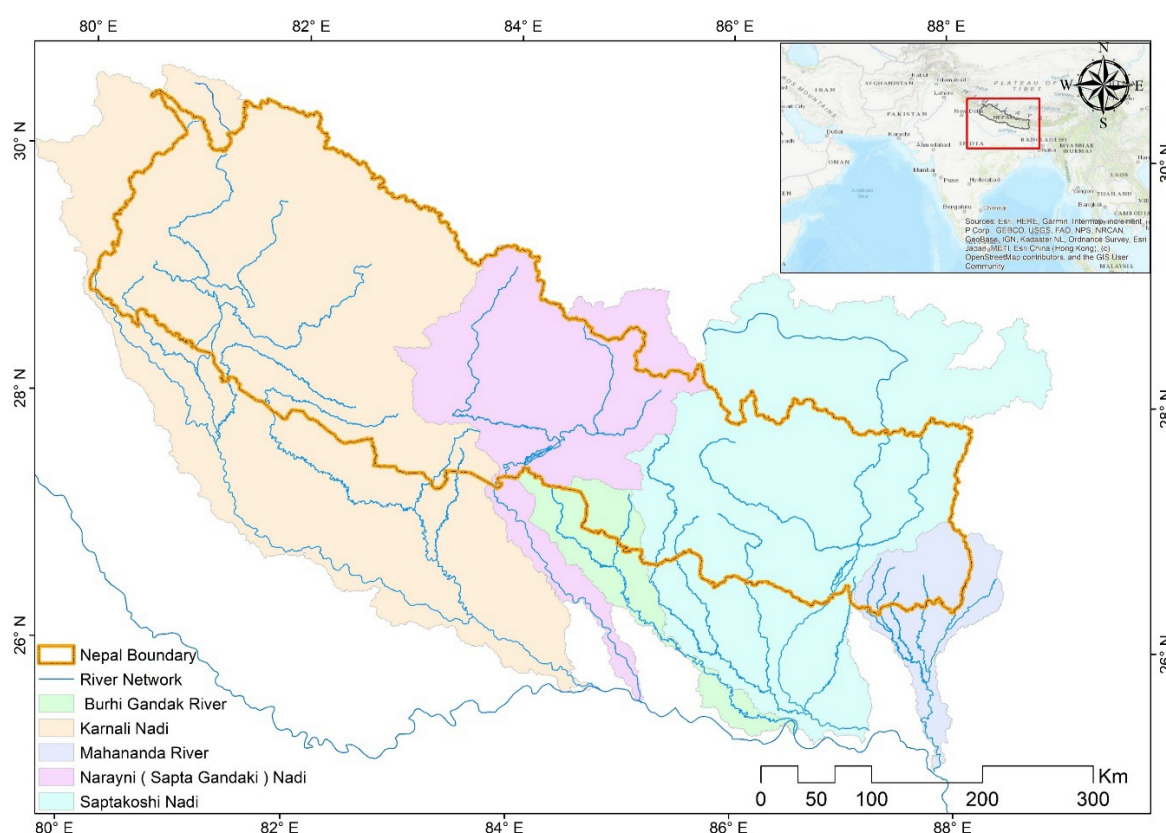


Figure 1-1: Regional context of Nepal's river system

At the highest level, the whole country was divided into four river basins, namely, Koshi, Gandaki, Karnali and Mahakali basins. Based on the physiographic region of river origin, the basins were further classified into core basin (river originating from Himalayan region), independent basin (river originating from Mahabharat region), and Chure-Terai basin (river originating from Chure and Terai region of Nepal). Each river basin was further divided into sub-basins and each sub-basin was further divided to watersheds, the lowest hierarchical units. The watersheds were also further classified into three categories: Major Tributary Watershed, Inter-Watershed and Chure-Terai Watershed. A tributary of the main river channel having a catchment size greater than 100 km² was defined as a Major Tributary Watershed. The drainage area between two Major Tributary Watersheds was defined as an Inter-Watershed. Similarly, the watershed located in Chure and Terai region was defined as a Chure-Terai Watershed.

Despite those great efforts, it was found that some of the HUs defined in those earlier efforts were not based on hydrological boundaries, naming criteria were not comprehensive and not well documented, and the need was felt in updating the coding convention. In this context, an effort was made to update Watershed Atlas of Nepal.

1.2 Objectives

This document aims to shed light on the following objectives;

- i) Delineate hydrological boundaries of rivers up to 4 levels for the entire Nepal by selecting a suitable digital elevation model (DEM), identifying suitable nodal points, and then applying GIS-based tools to delineate the boundaries.
- ii) Develop 'classification standards for HUs in Nepal' by developing criteria, naming convention and coding convention for HUs of different levels of rivers by reviewing past efforts, international practices, and consultation with relevant stakeholders.
- iii) Prepare 'watershed atlas of Nepal' in the form of maps for HUs associated with up to four-level of rivers.

1.3 About This Atlas

The National River Basin Management Strategy (2023), Water Resource Strategy (2002) and National Water Plan (2005) have emphasized holistic and integrated development of water resources yet a systematic delineation of river basins up to the watershed and sub-watersheds level has not been well documented in the Nepalese context. As a pioneer effort this Watershed atlas was developed using classification standards and coding framework which were widely practiced globally. Department of Forests and Soil Conservation (DoFSC) in collaboration, coordination with other Ministries, Departments, Institute of Engineering and national experts made an effort to publish this 'Watershed Atlas of Nepal' with intensive consultation and cooperation with in-depth consultation and joint decision. The watershed delineation and coding system was focused on integrated natural resources/watershed management based on identified hy-

drological units (HUs). The atlas used four levels of hierarchical division of HUs, namely, basin, sub-basins, watersheds and sub watersheds. These hierarchical levels were determined based on aerial extent, hydrologic systems, origin which have less than 20 square kilometer in size. About 1290 River systems/Hydrological units were examined with their size, origin and drainage outlets. Given a diversity in origin, size, and nature of river systems, a mixed approach has been considered as a criterion for standardizing river system classification in Nepal. The rivers and streams flowing through Nepal originate from High Himalayas, High Mountains, Middle Mountains, Shiwalik or Chure and Terai. These rivers are classified into four levels of stream. Level-1 streams continue to flow beyond the national boundary of Nepal into India, Level-2 streams flow into the Level-1 streams within the national boundary of Nepal, Level-3 streams flow into Level-2 streams and Level-4 streams into Level-3. "River Level" in this document is defined as similar to 'stream order' reported in literature but in reverse direction, which is also known as bottom-up approach of stream ordering. The main river is assigned as Level-1, its tributary as Level-2, and so on. Basically, up to four levels of HUs in Nepal are defined using basically three criteria – level, origin, and area threshold. After the classification of HUs of Nepal into different names, unique "hydrologic unit code (HUC)" has been assigned to each HU. The HUC is alpha-numeric starting with two (2) alphabets which corresponds to abbreviated basin names (e.g., KO for Koshi Basin). In case of independent basins, the HUC begins with eight (8) digits which is the combination of alphabets and special characters. For example, "BG-I (KO)" which indicates "Bagmati (Independent)" basin which drains to Koshi Basin beyond Nepal-India boundary. In case first two letters of the basin (independent) are the same (e.g. Bagmati and Babai, both independent basins have the same first two letters), first letter is kept the same, where as in case of second letter, the third letter shall be used for one of them. In this specific case, in the coding system used in this report, Babai is taken first, therefore, its code has BA whereas in case of Bagmati, its code has "BG". Sub-basins are denoted by numbers 1-n, 1 being the largest sub-basin of the corresponding basin. Similarly, watersheds are also denoted by numbers 1-n while sub-watersheds are denoted by numbers 01-nn. The codes at basin, sub-basin, watershed and sub-watershed levels are joined with special character hyphen (-) to form the HUC. For example, KO at basin level, KO-1 at sub-basin level, KO-1-1 at watershed level and KO-1-1-01 at sub-watershed level. The Watershed Atlas was approved from Government of Nepal, Ministry of Forests and Environment (Minister Level decision) dated on 15th Dec. 2025.

2. PRACTICES OF WATERSHED STANDARDIZATION – A REVIEW

2.1 Evolution of River Basin Coding Approaches

The delineation of a hydrological boundary contributing to the surface runoff at a particular outlet is the first and the most important step in many areas of environmental, engineering and management studies like aquatic habitat, flood, and water pollution studies. Hydrologic Unit (HU), as defined by, NRCS (1995) is “an area of land, above or upstream from a specific point on a stream, which is defined by a hydrologic boundary that includes all source areas that could contribute surface water runoff, directly or indirectly to the designated outlet point”. This definition is adopted in this report too. A large number of hydrological boundaries of various sizes and nature exists within a drainage system, which calls for defining some standardization and codification criteria for classifying the hydrological boundaries. Various proposals use different criteria and approaches for the codification of HUs (e.g., Jackson, 1834; Gravelius 1914; Horton 1945; Strahler 1952, 1957; Shreve 1966; Pfafstetter 1989) as synthesized in Teixeira et al. (2022). There is no uniformity in literature on watershed classification standardization approaches as clearly mentioned in Khan et al. (2001).

As per Beckinsale and Chorley (1991), one of the first studies to order and hierarchize branches within a HU goes back to Jackson (1834), in which, he proposed a classification scheme that considers the stream that flows into the seas is the first-order stream, while the junction of two first-order streams forms the second-order stream, and so on. The analysis is performed downstream to upstream, and the sea is the initial reference.

Graveliu (1914) acknowledged the idea of Jackson (1838) and proposed that all the segments that form the main stream flowing into the sea or lake or ocean should be designed as being of Order 1, while all stream segments that drain into this stream as Order 2 and so on. All the tributaries that flow right into a 1st order course are said to be the second order, etc. down to the smallest fingertip tributaries assigned the highest order.

Horton (1945) proposed that drainage channels that have no tributaries should be considered 1st order streams and second order streams are those which have only first-order streams as tributaries. Third order channels receive second-order or first-order tributaries, and so forth, from the source to the basin mouth.

Strahler (1952, 1957) proposed classification scheme based on the first part of Horton's stream-ordering method. It's sometimes jointly called as Horton-Strahler method too. According to this method, first-order streams have no tributaries. Second order streams are formed when two first-order streams come together downstream and so forth to the basin mouth. When two streams of unequal order join each other, the junction stream downstream has the same order as the higher-order stream. The passage to a higher order occurs only when two segments of the same order join together.

2.2 River Basin Classification and Coding Practices in Selected Countries

Many countries have focused on delineation of watersheds to various levels of hydrologic units resulting in nested catchments and associating these HUs with alphanumeric or numeric codes in order to facilitate the collection, organization and distribution of hydrologic data. This section synthesizes practices of watershed standardization (e.g., delineation, naming, and coding) system adopted in selected countries with specific focus on the approaches of those systems, basis for division of hydrological units and terminologies used. They are summarized in Table 2-1 and elaborated in the following sub-chapters.

Table 2-1: Catchment coding system of selected countries across the globe

S.N.	Name	Levels of sub-divisions	Names of each sub-division [Mean area, km ²]	Coding approach
1	USA's system	6	Regions (500,000); Sub-Regions (50,000); Basins (25,000); Sub-basins (4,000); Watersheds (135-1000); Sub-Watersheds or Cataloguing units (40-135)	12-digit hydrologic unit codes (HUCs)
2	German system (LAWA)	NA	Entire country into 6 major drainage systems; each drainage system into 9 sub-catchments	Pfaffstetter system
3	Norwegian system	9	Water system area, river basin, sub-unit in the river basin, central catchment, sub-unit in the central catchment, edge area, sub-unit in the edge area, coastal area, and sub-unit in the coastal area	REGINE
4	Portuguese system	NA	NA	Pfaffstetter system, with some exception
5	Finish system	4	NA	NA
6	European system	NA	NA	ERICA: MM BBB N1 N2 N3 N4 ... A
7	Australian system	3	Drainage Division (12); Water Regions (77); Basins (254)	
8	Indian system	5	Water Resources Division (3), Water Resources Region (6), Basin (27), Sub-Basin (101), Watershed (4,566)	Nine-digit watershed codification system

Notes: ECRINS is European Catchments and River Network System; NA is not available/accessible;

2.2.1 United States of America's system

The Water Resources Division of the US Geological Survey (USGS) developed "Hydrologic Unit Maps", that depict approved boundaries of and numerical codes for, river-basin units of the United States (Seaber et al., 1987). The entire country has been nested into four levels: regions, sub-regions, accounting units and cataloguing units. The first level of classification divides the US into 21 major geographic areas or regions. These geographic areas (hydrologic areas based on surface topography) contains either the drainage area of a major river, such as Missouri region, or the combined drainage areas of series of rivers, such as Texas-Gulf region which includes a number of rivers draining into the Gulf of Mexico. The second level of classification divides the regions into 222 sub-regions with varying number of sub-regions in each region. A sub-region includes the area drained by a river system, a reach of a river and its tributaries in that reach, a closed basin(s), or a group of streams forming a coastal drainage area. The third level of classification subdivides many of the sub-regions into accounting units, 352 accounting units in total. These hydrologic accounting units' nest within, or are equivalent to the sub regions. At the fourth level of classification, 2149 cataloging units are identified, which are the geographical area representing part or all of a surface drainage basin, a combination of drainage basins or a distance hydrologic feature. These four levels of subdivision used for the collection and organization of hydrologic data are referred to as "hydrologic units". These hydrologic units at each level are associated with 2-digit 'hydrologic unit codes (HUCs)', such that the lowest level hydrologic units (i. e., cataloging units) get 8-digit hydrologic unit codes. In 2010, the hydrologic unit maps have been updated and referred to as "Watershed Boundary Dataset" which consists of 6 level of sub-divisions (12-digit HUCs) over previous 4 level sub-division (8-digit HUCs). The updated maps consist of 22 regions, 245 sub-regions, 405 basins (accounting units), 2400 sub-basins (cataloging units), 19,000 watersheds and about 105,000 sub-watersheds.

In addition, each HU has been assigned a name, the name corresponding to the principal hydrologic features within the unit. In the absence of such features, the assigned name may reflect a cultural or political feature within the unit. All regions and sub-regions are uniquely named; however, the accounting units are uniquely named only within each region, and the cataloging units are uniquely named only within each accounting unit. The Hydrologic Unit Maps show drainage, hydrography, culture and political and hydrologic unit boundaries and codes, thus providing a standard geographic and hydrologic framework for detailed water-resource and related land resources planning.

Almost all hydrologic units larger than 1800 km² (700 mi²) in area were defined in the hierarchy adopted in the "Hydrologic Unit Maps" with units smaller than 1800 km² identified in special circumstances. Approximate mean areas of regions, sub-regions, accounting units, and cataloging units are, respectively, 500000, 50000, 25000 and 4000 km². Meanwhile, with the adaptation of 6 level classification in "Watershed Boundary Dataset", much smaller hydrologic units with areas corresponding to (135 km² to 1000 km²) at watershed level and (40 km² to 135 km²) at sub-watershed level have been identified.

2.2.2 German catchment coding system

The German method of catchment coding has been established by the Länderarbeitsgemeinschaft Wasser (LAWA) (Britton, 2002). The coding system is hierarchical and purely numeric. The system is, as far as possible, related to hydrological catchments. Every subdivision of a catchment into sub-catchments introduces a new digit. The system is very similar to the Pfafstetter system, except that the numbering is carried out in the other direction. Thus, the sub-basins are numbered from the headwaters to the river mouth.

The entire country has been divided into 6 principal drainage systems. Every catchment thereafter can be subdivided into 9 sub-catchments. Sub-catchment 1 characterizes the headwater area. The even numbers 2, 4, 6 and 8 stand for tributary catchments. The odd numbers 3, 5 and 7 express inter-catchment areas along the main river. These inter-catchment areas are hydrological catchments, since all water drains to one outlet point. Number 9 represents the area where the river flows into another river or into the sea. The subdivision of inter-catchment areas is made following exactly the same methodology. Between the outlets of the principal drainage systems, there are coastal areas. These do not belong to any principal catchments. They are drained directly into the sea by smaller rivers and all of these areas receive the digit 9 on the highest level of hierarchy of the LAWA system. On the second hierarchical level, these areas are subdivided according to geographical neighbourhood. The borderline between these sub-areas is subjectively determined.

2.2.3 Norwegian catchment coding system

The Norwegian catchment coding system divides the territory of Norway into hydrological water system area which are not identical to hydrological catchments (Britton, 2002). Norway's coding system of hydrographic units proposed to REGINE form of hierarchy, each level being more detailed than the last. The water system area on the highest hierarchy level is subdivided into two parts, a main catchment with single outlet and a remaining area drained by diffuse drainage system or minor water courses along a lake or the coastline. It proposed following nine categories: water system area, river basin, sub-unit in the river basin, central catchment, sub-unit in the central catchment, edge area, sub-unit in the edge area, coastal area, and sub-unit in the coastal area.

The main catchment area can be subdivided into 24 sub-areas at most using the letters A to Y while the areas of diffuse drainage can be sub-divides into 9 sub-areas employing the numbers 1 to 9. The same methodology, switching between a qualitative distinction (and addition of a new digit) and division into sub-areas (without addition of a digit) is now applied for the lower levels of hierarchy. For example: Area 016.E can be subdivided into a main catchment, 016.EZ, and a remaining area, 016.E0. Catchment 016.EZ can be subdivided into sub-area 016.EA to 016.EY, and unit 016.E0 can be subdivided into 0.16.E1 to 016.E9, and so on.

2.2.4 Portuguese catchment coding system

Both the Pfafstetter and German LAWA system were found adequate for Portugal but the LAWA system would require modification in the treatment of Coastal areas. Hence the Pfafstetter system was adopted with following exceptions. The

digit '0' is not used to code the closed basins, but to identify the level beyond which coding is no longer possible with existing topological information. A north to south rule was used when initially numbering the Portuguese major river basins and immediate coastal regions. The closed basins were filled to produce a continued flow beyond the depression.

Generally, between 3 and 7 levels of Pfafstetter coding was required. However, in some instances, 9 levels were required to identify all of the rivers visible on 1:25,000 scale mapping. Where 4 tributaries could no longer be found on 1:25,000 maps, then the coding terminated. However, this always produced catchments that were less than 10 km².

2.2.5 Finish catchment coding system

The Finish codes start with the identification of regions (basins) and then deal with the identification of networks (river and stream) within these regions (Britton, 2002). A final component of the code gives us an indication of the size of the up-stream catchment. The initial component of the code (basins and sub-basins) is also used to start lake coding.

At the highest level, the 74 main river basins, larger than 200 km², are identified and numbered. These main basins are then divided into sub-basins down to three levels of hierarchy. Also, 177 small coastal basin boundaries were determined, but without further division into sub-basins. This basin boundary inventory was based on 1:50 000 topographical maps. The boundaries were delineated manually, then digitized. The river basins are divided into sub-basins and basin parts, beginning at the lower course and following the channel, which is selected to be the main channel; then the tributaries are numbered in a clockwise manner. The longest channel is usually selected as the main channel. The second level of the hierarchy refers to tributaries, and the third to creeks and minor rivers.

2.2.6 European coding system

Britton (2002) conducted a review of existing river coding system in number of member states of European Union. The review found that the coding practices in existence are somewhat similar, however, they are mostly situated to local topography. Thus, European Commission funded European Rivers and Catchments (ERICA) project with the objective of deriving a coding system structure that is suitable to all member states.

The European Rivers and Catchments (ERICA) (1997) provided a low resolution (1:1 million scale) digital database of rivers, canals, lakes, coastline and international boundaries for all of Europe. In addition, ERICA provided a medium resolution (1:250,000 scale) pilot study databases, concentrated on two areas –the Mino in Spain and Portugal and the Meuse in France and Belgium.

In the ERICA system, each river or tributary is identified with the following code format

MM BBB N1 N2 N3 N4 ... A

MM = a two-digit Marine code to identify the sea. Marine codes are based on the 1953 International Hydrographic Bureau system. For example, North Atlantic Ocean=23 and Irish Sea and St. George's Channel=19.

BBB = a three-digit Marine Border Code to identify the land-sea interface. Even numbers identify the points where the rivers meet the sea. Odd numbers are used to identify the land to sea boundaries between the river outlets. Thus, at most, the most significant 499 rivers can be identified. This is done from north to south and from west to east.

N1, N2, N3, N4 = a series of 2-digit nested catchment codes. Moving from river exit to source, the 49 most significant tributaries are identified and assigned consecutive even numbers. Each significant tributary has its own catchment. The remaining areas of the overall catchment now need to be identified. These are known as inter-catchments. Each inter-catchment is now numbered using consecutive odd numbers, starting with 1 being the inter-catchment between the seas and the first significant tributary. Thus, the two-digits assigned to N1 enables the catchment to be subdivided into 99 sub-catchments. Each sub-catchment can then be broken down further in the same manner, by the use of N2. This nested process can continue into further levels.

Areas draining directly to the sea (with diffused drainage or small rivers) will have odd numbered marine border codes and can use N1 to identify the most significant river, then N2 for the most significant tributaries, etc.

A=single character catchment size indicator. The catchment size code is used to overcome the fact that the coding structure is not otherwise related to the size of the catchments. Suggestions are made for size bands between A=1 km² and N=250,000 km².

After the ERICA project, the European Water Framework Directive (WFD) still realized the need for collaboration across national borders of European Union member countries to develop a common hydrological feature coding system after the digital hydrological data sets containing drainage basins, rivers and lakes of member countries demonstrated that, in most cases, the countries did not provide a consistent coding system. The uploaded data further demonstrate that there are few initiatives to define hydro-geographic objects in a consistent manner; for example, with regard to geometric descriptions, topographic naming and delimitation (e.g., where does a river start and end?). Under the Common Implementation Strategy (CIS) for the WFD, a working group of Member State experts developed a GIS Guidance Document, containing detailed descriptions of the content and format of the different hydrographic data layers to be provided as well as a recommendation for a hydrological feature coding system. The working group proposed a modified version of the Pfafstetter system as interim solution where extensive further river coding is expected (European Commission, 2003). The code takes the form
MS MW N1 N2 N3 N4, ...

Where,

MS = member state responsible for code assignment (outlet state for cross-border river segments). Use a 2-character Member State identifier, in accordance with ISO 3166-1-Alpha-2 country codes.

MW = Marine Waters identifier (In accordance with the International Hydrographic Organization delineation, with possible further local sub-divisions per regional marine agreements).

N1 N2 N3 N4, ... = Pfafstetter code, a series of 1-digit nested code

2.2.7 Australian system

The Australian Water Resources Council (AWRC) River Basins and Drainage Divisions divides the continent of Australia into 12 drainage divisions which are further subdivided into 77 water regions and 245 basins (Stein et al., 2014). This division does not always adhere to topographically defined hydrological boundaries and does not recognize the distributaries that link many major river systems in Australia. The nested sub catchments that supported the National Land and Water Resources Audit supplied a finer sub division of topographically derived catchment but failed to recognize distributary drainage structures.

2.2.8 Indian system

The Watershed Atlas of India published by "India-WRIS" divides India into 5 hydrologic units: Water Resource Division, Water Resource Region, Basin, Sub-Basin and Watershed (Bhawan & Puram, 2014). At the highest level, the entire country has been divided into 3 water resources divisions based on sea or international boundary the drainage flows to: all drainage flowing into Arabian sea, all drainage flowing into Bay of Bengal and minor rivers draining into other basins/countries (Myanmar, China, and Bangladesh), highlighting the broad drainage pattern of the country. At second level, water resource divisions have been further subdivided into 6 water resources regions: Indus drainage, Rivers draining into Arabian sea, Rivers draining into Bay of Bengal, Brahmaputra drainage, Minor rivers draining into other basins/countries (Myanmar, China, and Bangladesh) and Island drainage. At third level, each water resource region has been divided into basins which constitute individual big river or a combination of smaller ones which are contiguous to each other. The entire country is covered by 27 basins. The fourth level divides each basin further into number of sub-basins which are mostly pertinent to main tributaries or a group of contiguous small tributaries or individual streams. In some of cases, where the drainage systems are too large, basin is divided into upper, middle and lower sub-basins. The entire country consists of 101 sub-basins. At the lowest hierarchical level, each sub-basins have been divided into a number of watersheds which are the smallest hydrologic units. Topography and hydrological features as well as area criteria were considered for placing appropriate pour point for watershed delineation. Watersheds are delineated from upstream to downstream. Total 4566 watersheds have been delineated from above sub-basins. The area of watershed ranges from 200-1800 km².

The codification schema has assigned unique code for each category of hydrological unit. Different stages of delineation have been codified in a systematic way using alphanumeric codification system. Although the document distinctly mentions five hydrologic units, the codification schema does not assign any alphanumeric code corresponding to water resources division into the hydrologic units' codes. The hydrological units and codification schema adopted in India-WRIS are shown in Table 2-2.

Table 2-2: Details of hierarchical levels and hydrologic unit codes: Watershed Atlas of India

S. N.	Hydrological unit boundary	Size range (km ²)	Average size(km ²)	Width/ Digits	Code
1	Region	8,247 – 20,85,387	6,27,953	1	A-F
2	Basin	669 – 8,08,337	1,17,788	02	01-27
3	Sub basin	669 – 1,24,867	31,485	03	XYZ
4	Watershed	200 – 1800	696	02	1-99

Codes for watersheds have been assigned from the upstream to downstream direction, sequentially based on the location of the outlet, starting with the uppermost stream outlet. The downstream code is always a higher number than the upstream code. The main-stem hydrologic unit carries the higher code when outlets are adjacent or break at the same place. All numbers from the lowest to the highest have been used and no numbers are skipped. For example, codification has been started at the upstream end of the drainage and code for the first watershed given as 01; code for the next watershed downstream as 02, and so forth.

2.3 Watershed Standardization Efforts in Nepal

Although Water Resource Strategy (2002) and National Water Plan (2005) have emphasized holistic and integrated development of water resources sector at river basin scale, a systematic delineation of river basins up to the watershed and sub-watersheds level has not been well documented in the Nepalese context. The available districts maps and topographic sheets at 1:25,000 scales are useful for the overall planning of development projects, but the development of water and natural resource management sector plan and policies demands a database at river-basin and watershed scale. Development planning in the water sector demands finer details of hydrological units and topological relationships between them for the implementation of various watershed management programs and projects. In the context of lack of institutional attempts for delineation of hydrological boundaries up to watershed level and generation of the database, the Department of Forests and Soil Conservation (DoFSC), Ministry of Forests and Environment commissioned the Preparation of Watershed Atlas of Nepal with the objective of developing finer topographically defined hydrological units and assigning a unique identifier code to each hydrological units defined.

The delineation and coding of the hydrological units are mainly done for two purposes (i) hydrological modelling and (ii) watershed management. Hydrological modelling generally uses numerical code while the codes for watershed management are generally alphanumeric. The watershed delineation and coding system developed by DoFSC for Nepal are focused on watershed management and thus utilized alphanumeric code to identify hydrological units (DoFSC, 2021). The atlas used three level hierarchical division of hydrological units, namely, basin, sub-basin and watershed. These hierarchical levels were determined based on hydrologic system, physiographic zone, size of hydrological units and watershed management practices of the country.

At the highest level, the whole country was divided into four river basins, namely, Koshi, Gandaki, Karnali and Mahakali basins. Based on the physiographic region

of river origin, the basins were further classified into core basin (river originating from Himalayan region), independent basin (river originating from Mahabharat region), and Chure-Terai basin (river originating from Chure and Terai region of Nepal). Each river basin was further divided into sub-basins and each sub-basin was further divided to watersheds, the lowest hierarchical units. The watersheds were also further classified into three categories: Major Tributary Watershed, Inter-Watershed and Chure-Terai Watershed. A tributary of the main river channel having a catchment size greater than 100 km² was defined as a Major Tributary Watershed. The drainage area between two Major Tributary Watersheds was defined as an Inter-Watershed. Similarly, the watershed located in Chure and Terai region was defined as a Chure-Terai Watershed.

A HU codification schema was developed to identify each category of the HU which is referred as Watershed Code. A unique alphanumeric code of 9 characters was assigned to each watershed unit. The watershed code incorporated information about all hierarchical levels of the hydrological units. The details about the hierarchical levels of hydrological unit delineation and watershed code are given in Table 2-3.

Table 2-3: Details of hierarchical levels of hydrological units delineation and watershed code applied in the Watershed Atlas of Nepal of DOFS (2021).

S.N.	Hydrological Unit	Code length	Code	Size Range (km ²)	Average Size (km ²)	Total Units
1a	Basin	2	AB	5,943-62,290	37,037	4
1b	Basin class	1	1-3	664-43,161	14,815	3
2	Sub-basin	3	XYZ	552-8,279	3,292	45
3a	Major Tributary Watershed	3	01-A,02-A to 98-A (even numbers only except 01)	101-6,444	460	210
3b	Inter-Watershed	3	03-B to 99-B (odd numbers only)	1-601	162	193
3c	Chure-Terai Watershed	3	01-C to 99-C	89-856	297	68

For example, the code KO1SKU10A represents for the hydrological unit (code going back from right to left) which is a Major Tributary Watershed (Code A), Rosi Watershed (code 10) of Sunkoshi-Upper Sub-basin (code SKU) of Core basin class (code 1) of Koshi basin (code KO). The Major Tributary watershed is named after its outlet river. The river name given in topographic maps is taken for watershed naming, Inter-Watershed is named by its largest branch and the main river. If the name of the branch river is not available in the topographic map, then the inter-watershed code is used instead of largest branch river. Similarly, Chure-Terai watershed is also named after its outlet river at Nepal-India border.

3. METHODOLOGY FOR CLASSIFYING HYDROLOGICAL UNITS IN NEPAL

The overall methodology is shown in Figure 3-1. The drafts of methodological approach, criteria for defining and coding hydrological units, and results were further strengthened with inputs through multiple rounds of meetings with technical personnels from Department of Forest and Soil Conservation (DoFSC) as well as Technical Advisory Committee (TAC) consisting of representatives from DoFSC, Water and Energy Commission Secretariat (WECS), Ministry of Energy, Water Resources and Irrigation (MoEWRI), Department of Water Resources and Irrigation (DWRI), and Department of Hydrology and Meteorology (DHM).

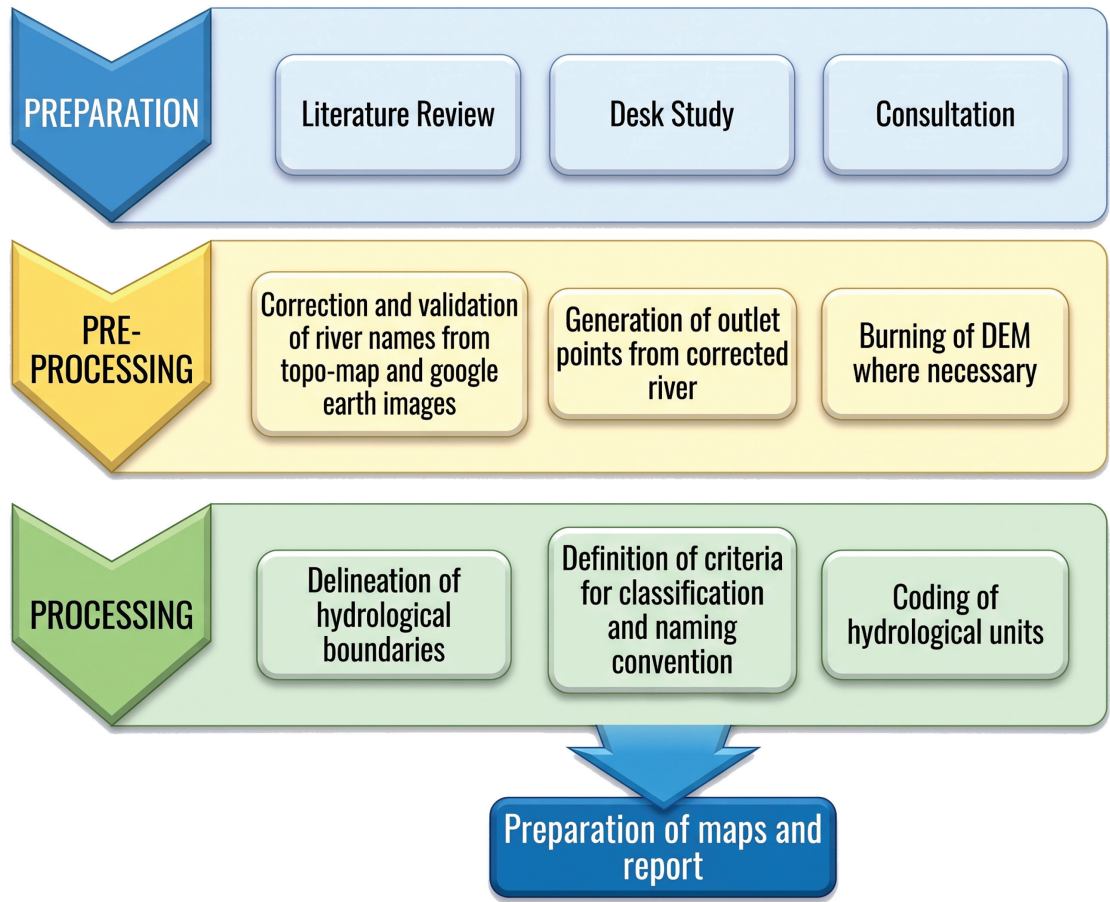


Figure 3-1: Overall methodological framework

3.1 Delineation of Hydrological Boundaries

Watershed were delineated based on a Digital Elevation Model (DEM). In many parts of the world, especially in developing nations like Nepal, highly precise air-borne DEMs are not readily accessible. Improved topographic data are essential for evaluating various aspects such as catchment hydrology, flood patterns, sediment movement, and deposition. However, traditional ground surveys (topographic and bathymetric) and Light Detection and Ranging (LiDAR) methods

are both costly and time-consuming. To cover extensive areas, we often rely on space-based DEMs. However, for specific river sections, periodic ground surveys become necessary. Several widely used space-based DEMs, such as ALOS World 3D – 30 m (AW3D30), ASTER Global DEM Version 3 (ASTER GDEM v3), SRTM, and Carto DEM v3, are accessible to public at a 30 m spatial resolution. Additionally, ALOS PALSAR is available at a resolution of 12.5 m. However, the abundance of choices can confuse practitioners trying to select the most suitable product.

In the Nepalese context, the performance of DEMs varies by location, indicating that different DEMs perform well in different areas. Talchabhadel et al. (2021) conducted a study in the West Rapti watershed, comparing real survey points with AW3D30, ASTER GDEM v3, SRTM-30, and Carto DEM v3. The AW3D30 DEM exhibited the best performance. Similarly, Jha (2018) compared the SRTM-30 DEM with topographic map survey data, finding that the SRTM DEM outperformed the DEM generated from Survey Department data.

In our examination at selected locations (e.g. in the Gandaki River Basin) and overlaying the river network onto Google Maps, voids were observed in the western part of the basin within the SRTM-30 DEM. Similarly, both AW3D30 and ASTER GDEM v3 exhibited similar characteristics, but AW3D30 showed the most accurate overlay in the southern part of the basin, while the ALOS PALSAR 12.5 m data had voids. Consequently, due to its better performance in this specific area, AW3D30 was chosen for further analysis.

The selected DEM was firstly projected to WGS_1984_UTM_Zone_45N then processed using GIS-based tool to generate flow accumulation and stream network. Raster calculator was used to generate stream network and flow accumulation raster with values greater than 500 was delineated as streams. The generated stream network was evaluated by overlaying with actual river network. The rivers were named based on the names displayed in topographic maps of Nepal obtained from the Mountains of Central Asia Digital Datasets (MCADD's <https://pahar.in/>). In the regions where the river network generated from adopted DEM showed significant discrepancy from actual river network, the DEM was hydrologically corrected (by burning correct river and streams into AW3D30 DEM).

Once the DEM was hydrologically corrected and river network was finalized, stream levels were assigned to each river using a bottom-up approach up to the 4th level. Level-1 has been assigned to rivers/streams having mouth at the international boundary of the country (e. g., Koshi or Saptakoshi). Level-2 rivers are those rivers discharging into Level-1 rivers within national boundary (e.g., Sunkoshi, a tributary of Koshi or Saptakoshi River), Level-3 rivers discharge into Level-2 rivers (e.g., Balephi Khola, a tributary of Sunkoshi River) while Level-4 rivers discharge into Level-3 rivers (e.g. Nyasem Khola, a tributary of Balephi Khola). Once the stream ordering of river networks was confirmed, the hydrologically corrected DEM was further processed to generate flow direction and flow accumulation rasters and finally delineate hydrological boundaries of rivers/streams of different orders. Only the HUs with drainage areas of 20 km² or more were considered for further sub-division of HUs. If hydrological monitoring by relevant agencies is made at tributaries with area of hydrological unit lower than 20 km², they are not reflected in this report.

Initially, Pfafstetter coding system was applied to delineate hydrological boundaries up to fourth level. The results were analyzed together with a team of experts. A conclusion was reached that the Pfafstetter system generated discrepancies and therefore it was decided not to use results from Pfafstetter system rather delineate hydrological boundaries of different levels of rivers using the first principle (i.e., checking manually to define pour points for hydrological boundaries of different order).

For the first-level HU, we delineated hydrological boundary with the pour point at the intersection of the river line and the boundary of Nepal. Subsequent hydrological boundaries of other orders were delineated using the outlet pour point as the branching-off point from the main river line. The outputs were cross-checked with a team of experts and finalized after making some minor edits. Figure 3-2 shows differences in delineated hydrological boundaries of second order based on Pfafstetter system and first principle.

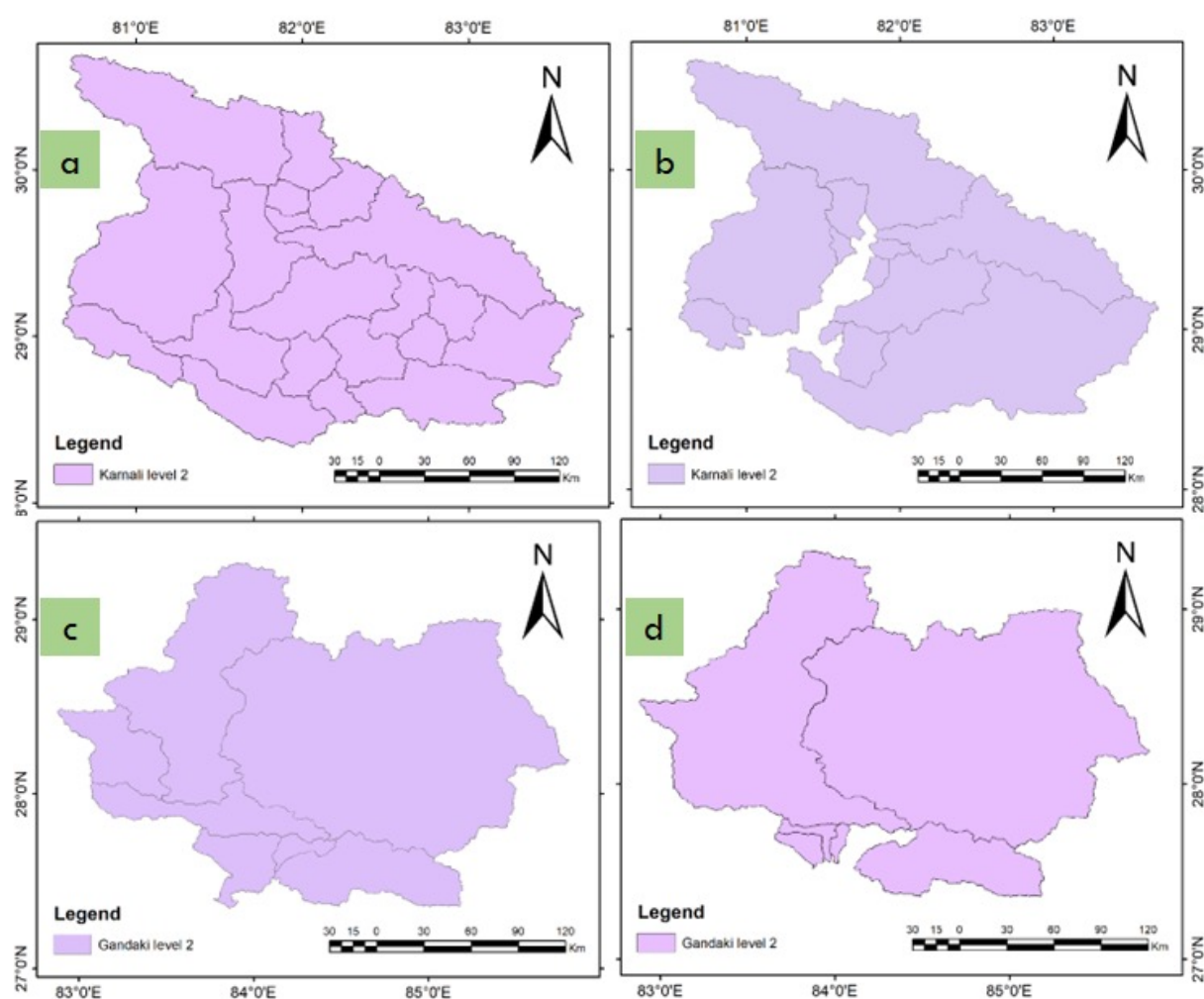


Figure 3-2: Comparison of performance on delineating hydrological boundaries of second-level HUs using Pfafstetter system and first principle: a) Pfafstetter-based delineation of Karnali River Basin; b) First principle-based delineation of Karnali River Basin; c) Pfafstetter-based delineation of Gandaki River Basin; d) First principle-based delineation of Gandaki River Basin.

3.2 Criteria for Classification and Naming Convention

Given a diversity in origin, size, and nature of river systems, a mixed approach has been considered as a criterion for standardizing river system classification in Nepal. The rivers and streams flowing through Nepal originate from High Himalayas, High Mountains, Middle Mountains, Shiwalik or Chure and Terai. These rivers are classified into four levels of stream. Level-1 streams continue to flow beyond the national boundary of Nepal into India, Level-2 streams flow into the Level-1 streams within the national boundary of Nepal, Level-3 streams flow into Level-2 streams and Level-4 streams into Level-3. "River Level" in this document is defined as similar to 'stream order' reported in literature but in reverse direction, which is also known as bottom-up approach of stream ordering. The main river is assigned as Level-1, its tributary as Level-2, and so on as shown in Figure 3-3. The area drained by each level of rivers vary significantly: 26-55,650 km² for level 1, 20-29,890 km² for level 2, 20-4439 km² for Level-3, and 20-1,863 km² for Level-4. These variations are largely influenced by the physiographic region of origin. Due to these broad ranges, it is not logical to use stream level alone as the basis for river system classification. Therefore, following three criteria were used for classifying HUs in Nepal: Level of stream, area threshold, and origin. Where, stream level alone is inadequate, area thresholds are also considered and where both of them are inadequate, origin of river is also added as additional criteria. Furthermore, in the instances where all three criteria also cannot classify a HU in a convincing way, exceptions are assigned and/or percentage of the drainage area within different physiographic regions has been considered as the basis for classifying a HU.

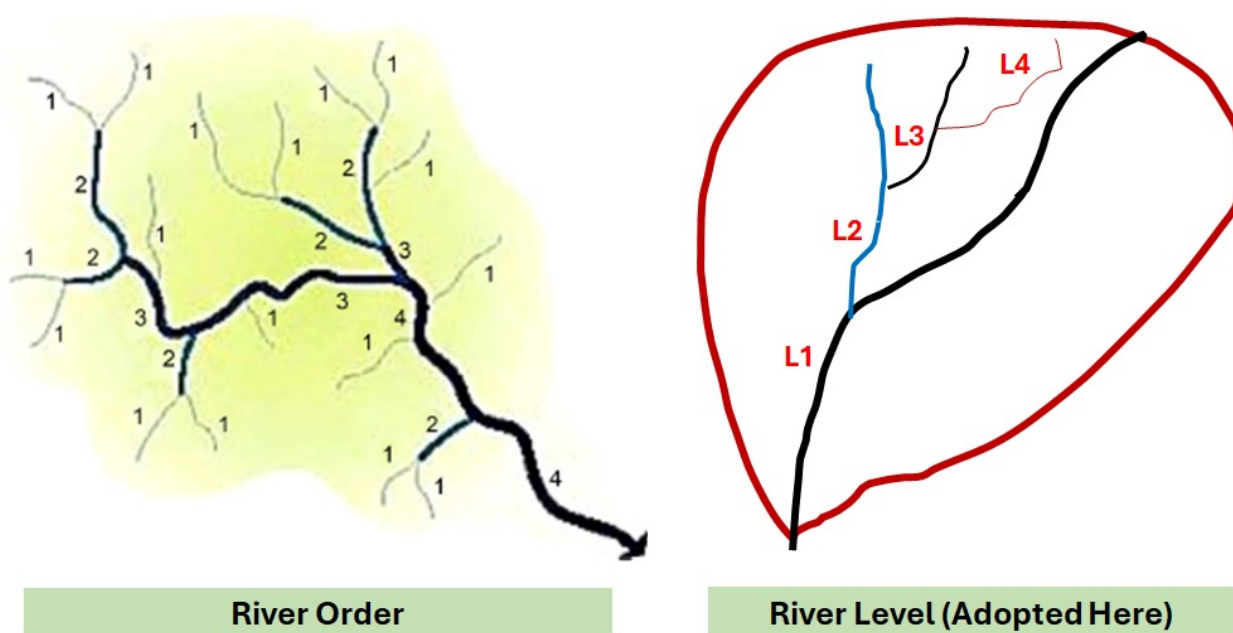


Figure 3-3: Illustration of river level definition adopted in this report. L1-L4 in the right hand side figure indicates Level-1 to Level-4.

On the basis of stream level, drainage area, and physiographic region of origin, the HUs have been classified into four classes, namely: basin, sub-basin, watershed and sub-watershed. Basin is the hydrological boundary of Level 1 stream originating from the High Himalayas. The hydrological boundary of Level-1 streams originating from Middle Mountains with more than 20% of drainage area within Middle

Mountain region have been termed as “independent basin” and written as “Basin (Independent)”. These streams merge with the level 1 streams of Basin beyond the national boundary of Nepal. “Sub-basin” is the term used to define the hydrological boundary of level 1 streams with drainage area 1500 km² or greater originating from Chure/Siwalik. Also, the level 2 streams originating from High Himalayas or High Mountains or Middle Mountains with drainage area 700 km² or greater is also defined as “sub-basin”. The hydrological boundaries of Level 1 streams originating from Chure/Siwalik and having drainage area greater than or equal to 300 km² is defined as “watershed”. Furthermore, Level 2 streams originating from High Himalayas or High Mountains or Middle Mountains with drainage area less than 700 km² and greater than or equal to 300 km² and level 3 streams with drainage area greater than or equal to 500 km² originating from any region have also been defined as “watershed”. Lastly, “sub-watershed” is defined as the hydrological boundary of Level 1 streams originating from Chure/Siwalik with drainage area less than 300 km². Furthermore, Level 2 streams with drainage area less than 300 km², level 3 streams with drainage area less than 500 km² and all level 4 streams are also defined as “sub-watershed”. The naming convention and classification criteria adopted is synthesized in Table 3-1.

In summary, up to four levels of HUs in Nepal are defined using basically three criteria – level, origin, and area threshold. These rivers are classified into four levels of stream. “River Level” in this document is defined as similar to ‘stream order’ reported in literature but in reverse direction. Level-1 streams continue to flow beyond the national boundary of Nepal into India, Level-2 streams flow into the Level-1 streams within the national boundary of Nepal, Level-3 streams flow into Level-2 streams and Level-4 streams into Level-3.

Table 3-1: Proposed naming convention of hydrologic units

SN	Name of Hydrological-Unit	Criteria (Level, Origin, Area Threshold)
1	Basin or Basin Independent	- Basin: Hydrological boundary of a Level 1 river originating from High Himalaya - Basin (Independent): Hydrological boundary of a Level 1 river originating from Middle Mountain and has more than 20% of the drainage area in the Middle Mountain Region
2	Sub-Basin	- Hydrological boundary of a Level 1 river originating from Siwalik/Chure region and having area $\geq 1,500$ km² - Hydrological boundary of a Level 2 river originating from High Himalayas or High Mountains or Middle Mountains and having area ≥ 700 km²
3	Watershed	- Hydrological boundary of a Level 1 river originating from Siwalik/Chure or Terai region and having area ≥ 300 km² - Hydrological boundary of a Level 2 river originating from High Himalayas or High Mountains or Middle Mountains region and having area $700 > A \geq 300$ km² - Hydrological boundary of a Level 3 river originating from any physiographic region and having area ≥ 500 km²

4	Sub-Watershed	• Hydrological boundary of a Level 1 river originating from Siwalik/Chure or Terai region and having area < 300 km² • Hydrological boundary of a Level 2 river originating from any region and having area < 300 km² • Hydrological boundary of a Level 3 river originating from any region and having area < 500 km² • Hydrological boundary of a Level 4 river of any origin and any size/area
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3.3 Statistics of Various Types of Hydrological Units in Nepal

The criteria described above resulted 1,290 HUs across the country: 11 basins (7 of which are independent basins), 28 sub-basins, 71 watersheds, and 1,180 sub-watersheds. Details of their naming as per different criteria (i.e., origin, level, and area threshold) are provided in the following Table.

SN	Origin	Level	Area Threshold (km ²)	Name of Hydrologic Unit	Number
1	High Himalayas	1	Any	Basin	4
2	Middle Mountains	1	More than 20% of drainage area fall in Middle Mountains region	Basin (Independent)	7
3	Siwalik/Chure	1	≥ 1500	Sub-basin	1
4	Siwalik/Chure or Terai	1	≥ 300	Watershed	20
5	Siwalik/Chure or Terai	1	<300	Sub-watershed	34
6	High Himalayas or High Mountains or Middle Mountains	2	≥ 700	Sub-basin	27
7	High Himalayas or High Mountains or Middle Mountains	2	700 > A ≥ 300	Watershed	17
8	-	2	<300	Sub-watershed	289
9	-	3	≥ 500	Watershed	34
11	-	3	<500	Sub-watershed	574
12	-	4	-	Sub-watershed	283
Total					1,290

3.4 Coding Convention for Hydrological Units in Nepal

After the classification of HUs of Nepal into different names, unique "hydrologic unit code (HUC)" has been assigned to each HU. The HUC is alpha-numeric starting with two (2) alphabets which corresponds to abbreviated basin names (e.g., KO for Koshi Basin). In case of independent basins, the HUC begins with eight (8) digits which is the combination of alphabets and special characters. For example, "BG-I(KO)" which indicates "Bagmati (Independent)" basin which drains to Koshi Basin beyond Nepal-India boundary (see Figure 3-4, for its illustration). In case first two letters of the basin (independent) are the same (e.g. Bagmati and Babai, both independent basins have the same first two letters), first letter is kept the same, where as in case of second letter, the third letter shall be used for one of them. In this specific case, in the coding system used in this report, Babai is taken first, therefore, its code has BA whereas in case of Bagmati, its code has "BG".

Sub-basins are denoted by numbers 1-n, 1 being the largest sub-basin of the corresponding basin. Similarly, watersheds are also denoted by numbers 1-n while sub-watersheds are denoted by numbers 01-nn. The codes at basin, sub-basin, watershed and sub-watershed levels are joined with special character hyphen (-) to form the HUC. For example, KO at basin level, KO-1 at sub-basin level, KO-1-1 at watershed level and KO-1-1-01 at sub-watershed level. The details of coding system adopted for different HUs along with the number of HUs under each category are provided in Table 3-2.

Table 3-2: Details of coding system adopted for different hydrologic units. The number within parenthesis in code length column indicates lengths for sub-basin, watersheds and sub-watersheds within independent basins.

S.N.	Hydrologic Unit (HU)	Code Length (Maximum)	Code
1	Basin	2	AB
2	Basin (Independent)	8	CD-I(AB)
3	Sub-basin	10	AB-1
4	Watershed	12	AB-1-1
5	Sub-watershed	15	AB-1-1-01

Coding of basins and basin (independent) are very straight forward, as their code length are fixed. In case of other units (i.e., sub-basin, watershed, and sub-watersheds), code length varies depending upon situation. They are illustrated with some examples hereunder;

- **Sub-basin of a basin:** KO-1 refers to the first sub-basin of the Koshi Basin, so it has code length of "4 digits".
- **Sub-basin of a basin (independent):** BG-I(KO)-1 refers to the first sub-basin of Bagmati, which is considered as independent basin, so it has code length of "10 digits". Therefore, maximum code length is 10.
- **Watershed of sub-basin of a basin (e.g., KA-1):** the first watershed has a code of KA-1-1, with the code length of 6 digits.
- **Watershed of sub-basin of a basin (independent) (e.g., BG-I(KO)-1):** the first watershed has a code of BG-I(KO)-1-1, with a total code length of 12 digits. Therefore, its maximum code length is defined as 12.
- **Sub-watershed of a watershed of a sub-basin of a basin (e.g., KA-4-1):** the first sub-watershed of the first watershed of the fourth sub-basin has a code of KA-4-1-01, which has a total code length of 9 digits.
- **Sub-watershed of a watershed of a sub-basin of a basin (e.g., BG-I(KO)-1-1):** the first sub-watershed of the first watershed of the first sub-basin has a code of BG-I(KO)-1-1-01, which has a total code length of 15.

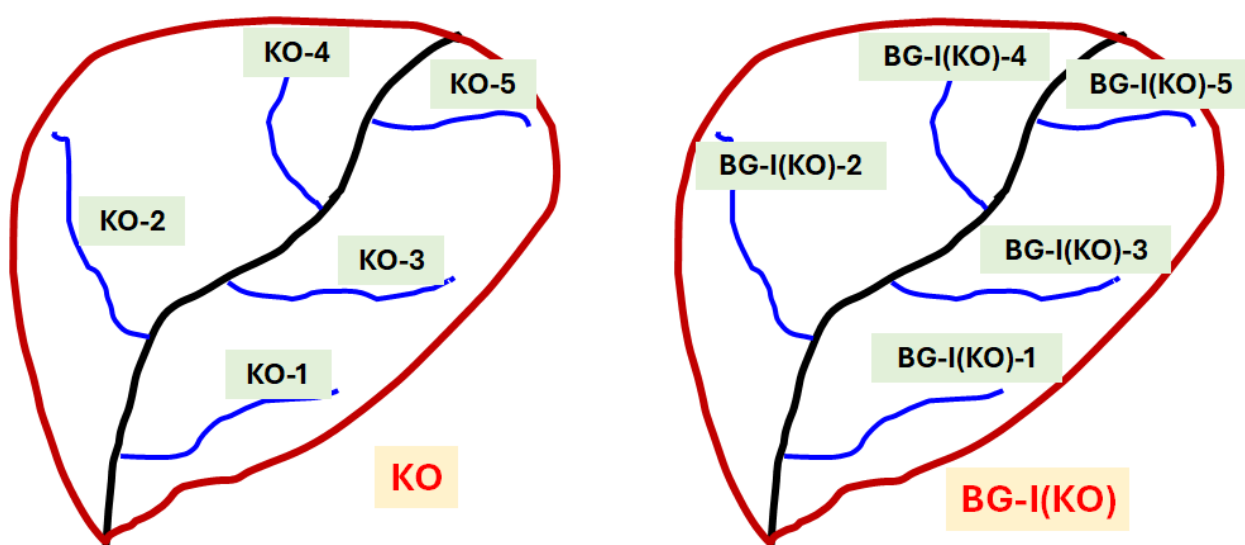


Figure 3-4: Illustration of sub-basins of "basin" and "basin (independent)"

3.4 Preparation, Verification and Approval of Watershed Atlas of Nepal

The classification standards were discussed among multisectoral Ministries, Departments and professional experts on watersheds, water resources, hydrologists and engineers. The Team of Technical Advisory Committee representing from Department of Forests and Soil Conservation, Water and Energy Commission Secretariat (WECS), Ministry of Energy, Water Resources and Irrigation, Department of Water Resources and Irrigation (DWRI), Water Resources Research and Development Center (WRRDC), and Department of Hydrology and Meteorology (DHM) developing the classification methodological standards and coding frame. Series of meetings and Intensive discussion among the expert teams, Technical Advisory Committee members has refined the watershed developing stages. The Watershed Atlas was approved by the Ministry of Forests and Environment (Minister level decision) on 15th December 2025.

4. CLASSIFICATION AND CODING OF HYDROLOGICAL UNITS IN NEPAL

Hydrological boundaries of different HUs were delineated using the first principle (i.e., checking manually to define pour points for hydrological boundaries of different order), which uses bottom-up hierarchical system up to Level-4. The AW3D30 was used to generate flow direction and flow accumulation raster. Application of a classification criteria explained in Section 3.2 resulted 1,290 HUs across the country: 11 basins (7 of which are independent basins), 28 sub-basins, 71 watersheds, and 1,180 sub-watersheds. Details of their naming as per different criteria (i.e., origin, level, and area threshold) are provided in the Table 4-1 and their outlet points are provided in Annex 24.

Table 4-1: Statistics of different types of hydrological units under various criteria.

SN	Physiographic Re-gion of Origin	Level	Area Threshold (km ²)	Name of Hydrologic Unit	Number
1	High Himalayas	1	Any	Basin	4
2	Middle Mountain	1	More than 20% of drainage area fall in Middle Mountains region	Basin (Independent)	7
3	Siwalik/Chure	1	≥ 1500	Sub-basin	1
4	Siwalik/Chure or Terai	1	≥ 300	Watershed	20
5	Siwalik/Chure or Terai	1	<300	Sub-watershed	34
6	High Himalayas or High Mountains or Middle Mountains	2	≥ 700	Sub-basin	27
7	High Himalayas or High Mountains or Middle Mountains	2	700 > A ≥ 300	Watershed	17
8	-	2	<300	Sub-watershed	289
9	-	3	≥ 500	Watershed	34
11	-	3	<500	Sub-watershed	574
12	-	4	-	Sub-watershed	283
Total					1290

4.1 River of Different Levels in Nepal

Rivers up to Level-4 throughout Nepal are identified and named. A total of 1,918 rivers up to Level-4 and having drainage area of 20 km² or more were identified from the overall river network of the country; out of them, 66 rivers are of Level-1, 378 are of Level-2, 779 are of Level-3, and 695 are of Level-4 (Table 4-2). Rivers of Level-1 to Level-4 along with hydrological boundaries of 11 basins (including seven independent basins) are shown in Figure 4-1.

Table 4-2: Details of rivers classified into different levels.

S.N.	River Level	Number of Rivers	Range of Drainage Area (sq. km.)
1	1	65	26-55,650
2	2	379	20-29,890
3	3	779	20-4,439
4	4	695	20-1,863
Total		1,918	

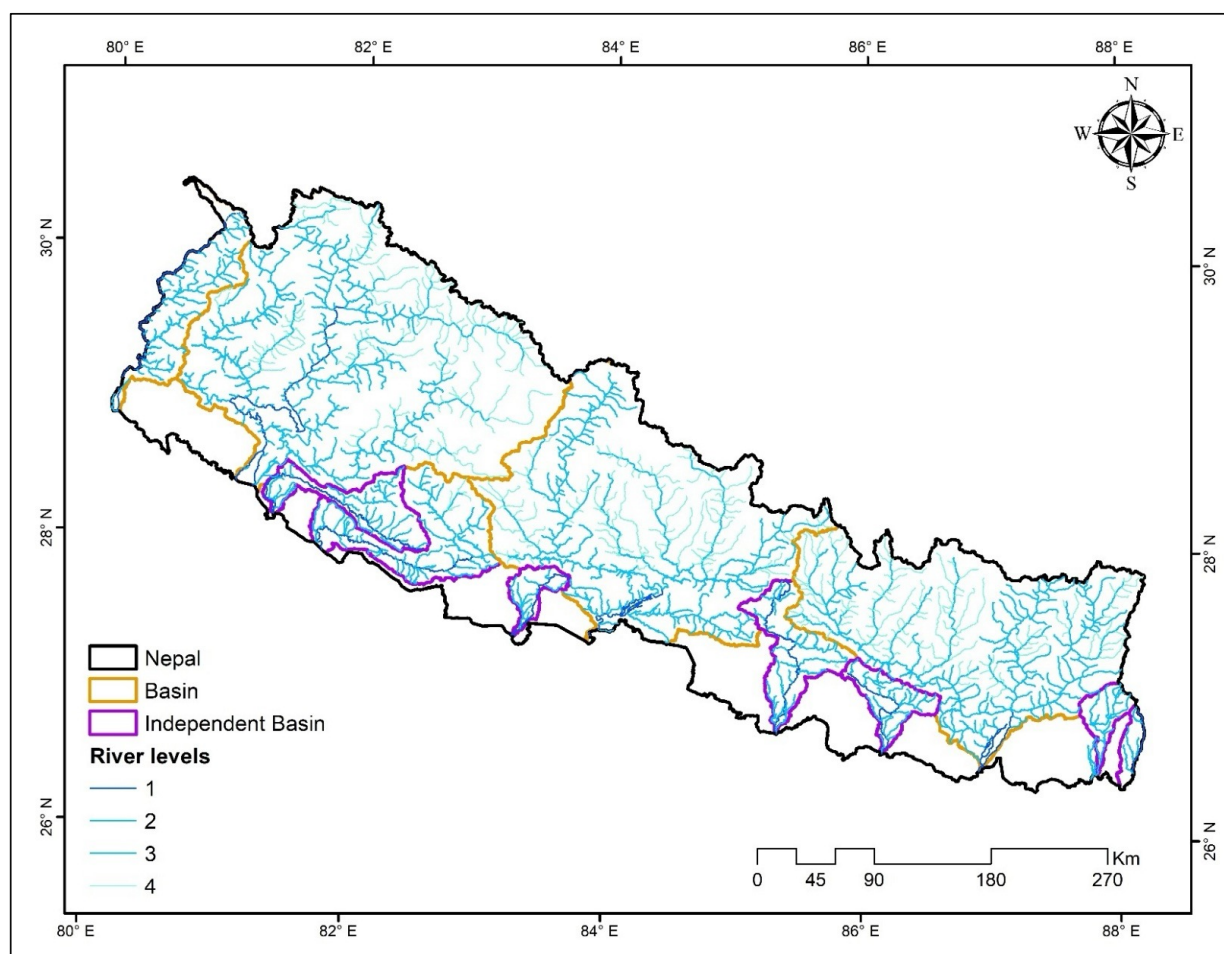


Figure 4-1: Rivers of up to Level-4 in Nepal.

4.2 Basins in Nepal

There are 11 basins in Nepal out of which seven (7) are “independent basins”, which are the hydrological boundaries of Level-1 rivers originating from Middle Mountains, having more than 20% of drainage area within the Middle Mountain region, and discharges into the Level-1 rivers originating from High Himalayas beyond the national boundary of Nepal. The ‘basins’ in this report corresponds to ‘major river systems’ in Nepal and ‘independent basins’ to ‘medium river systems’ in Nepal that are mentioned in other national documents. Basins are given alphabetical HUC with length of two characters. First two letters of a HU are used as abbreviation for basins i.e., GA for GAndaki Basin, KA for KArnali Basin, KO for KOshi Basin, and MA for MAhakali Basin. In the case of the “independent basins”, eight (8) character HUC with a combination of alphabets and special characters have been assigned. The first two alphabets are the abbreviation of “independent basin” and the last five letters indicating the HU is an “independent basin” and the name of the Level-1 basin, originating from the High Himalayas, in which the contribution of the “independent basin” joins after passing through the Nepal-India border. For example, BA-I(KA) refers to the Babai, which is an “independent basin” discharging into the Karnali River after passing the Nepal-India border. If the initial two alphabets of two basins or independent basins are the same, third character has been used for coding the second basin. In case a basin name consists of two words, first letters from each word have been used in the code (e.g., WR for the West Rapti). It resulted following codes for the seven independent basins: BA for BAbai, BG for BaGmati, KM for KaMala, KN for KaNkaimai, ME for MEchi, TI for TInau and WR for West Rapti. For the “independent basins” that drain to river systems other than that flowing through Nepal before joining the Ganges, the nearest Level-1 River flowing through Nepal has been taken as the HU those independent basins contribute to. For example, Kankaimai and Mechi “independent basins” contribute their flow to Mahananda River in India, which is a tributary of Ganges, therefore, basin code of KO is attached to the code of those “independent basins”. Please refer to Table 4-3 for the key characteristics of individual basins or independent basins of Nepal and Figure 4-2 for the spatial distribution of hydrological boundaries. Please refer Annex 25 for details.

Table 4-3: Basins in Nepal – names, drainage areas and codes

S.N.	River Name	River Level	Total Drainage Area (km ²)	Area within Nepal (km ²)	Hydrologic Unit Name	Hydrologic Unit Code
1	Karnali	1	46,193	43,153	Basin	KA
2	Gandaki	1	36,497	32,148	Basin	GA
3	Koshi	1	55,650	27,440	Basin	KO
4	West Rapti	1	6,454	6,454	Basin (Independent)	WR-I(KA)
5	Mahakali	1	15,942	5,254	Basin	MA
6	Bagmati	1	3,815	3,815	Basin (Independent)	BG-I(KO)

7	Babai	1	3,422	3,422	Basin (Independent)	BA-I(KA)
8	Kamala	1	2,084	2,084	Basin (Independent)	KM-I(KO)
9	Kanakaimai	1	1,459	1,459	Basin (Independent)	KN-I(KO)
10	Tinau	1	1,145	1,145	Basin (Independent)	TI-I(KA)
11	Mechi	1	857	705	Basin (Independent)	ME-I(KO)

The drainage area of the basins tabulated in Table 4-3 have been validated by reviewing the reports published by governmental institutions. Precisely, this study has used "The River Basin Atlas of Nepal" published by Water and Energy Commission Secretariat (WECS) as the reference for drainage areas.

The drainage areas of Gandaki, Karnali and Mahakali basins as well as Mechi (Independent) basin within Nepal as listed in Table 4-3 are equal to drainage area mentioned in the "The River Basin Atlas of Nepal". In case of Kamala independent basin, drainage area is equal to the drainage area mentioned in WECS water resources development strategy for Kamala basin.

In the case of Koshi Basin, the drainage area reported in "The River Basin Atlas of Nepal" prepared by WECS is 27,818 km², 378 km² more than that tabulated in Table 4-3. The discrepancy in the area is due to the fact that, this study has considered the hydrological boundary of the Koshi Basin by fixing the outlet point at national boundary of Nepal. The 378 km² drainage area has thus been accounted in hydrological boundary of Triyuga sub-basin and two unaccounted polygons on the left and right of the Koshi Basin.

Similarly, the drainage area of the "Babai independent basin" obtained in this study is 3,422 km² which is 157 km² less than that reported in WECS's Atlas. In this case, the hydrological boundary delineated and computed in this study have been taken and the difference in area has been considered in the unaccounted polygons (whole 125 km² polygon on the left of Babai independent basin and some portion of polygon in the right of Babai independent basin). A thin east west stretching unaccounted polygon with area 517 km² is not included in the drainage area of the "West Rapti (independent) basin" in this study, thus compensating for the discrepancy in drainage areas between this study and WECS's Atlas, which has reported the drainage area of West Rapti (independent) basin as 6,971 km². In the Bagmati (independent) basin, there is a small difference in the drainage area obtained in this study and that reported in the WECS's Atlas; the Atlas has reported 29 km² more. The fact is that the drainage area of most of the watersheds and sub-watersheds within the Bagmati (independent) basin are the same in both studies, and this study has reported drainage area within hydrological boundaries address the discrepancies in the drainage areas in two studies. For the case of Kanakimai (independent) basin, the area obtained in this study is 127 km² more than that reported in WECS's Atlas, which is also due to consideration of drainage areas. The discrepancy is addressed in the unaccounted polygons left and right of Kankaimai (independent) Basin.

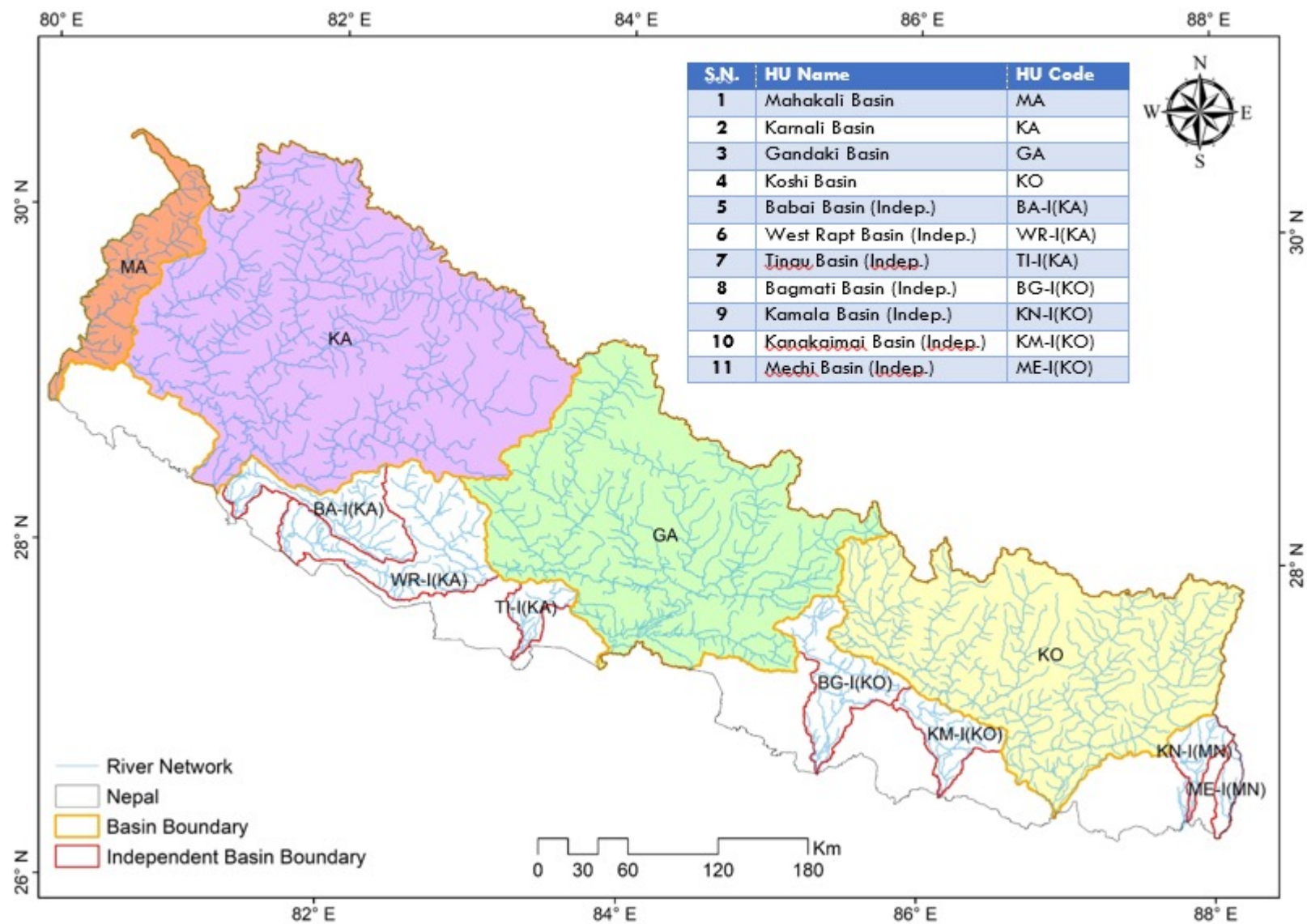


Figure 4-2: Spatial distribution of river basins in Nepal.

4.3 Sub-Basins in Nepal

There are 28 sub-basins in Nepal out of which only one, i.e., Mohana, is the HU corresponding to the Level-1 River originating from Chure/Siwalik and the rest of the HUs correspond to Level-2 rivers originating from the High Himalayas or High Mountains or Chure/Siwalik. Among 28 sub-basins, 27 correspond to Level-2 Rivers within the Basins, with distribution of 8 in Koshi, 8 in Karnali, 6 in Gandaki, 2 in Mahakali, 2 in Wes-Rapti (independent) Basin, and 1 in Babai (independent) Basin. One sub-basin "Mohana" corresponds to Level-1 River.

Sub-basins corresponding to Level-2 rivers are given alpha-numeric HUC with length of 4 characters, which is a combination of 2-character alphabet corresponding to the Basin it falls within and one digit (i.e., 1-n) assigned according to descending order of area of sub-basins within each basin separated by hyphen. For example, KO-1 represents the largest sub-basin in the Koshi Basin.

The sub-basins within "independent basin" are assigned HUCs in similar manner and the length of code for the sub-basins within independent basins is of 10 characters. For example, BG-I(KO)-1 represents the largest sub-basin within Bagmati (independent) Basin.

For sub-basin originating from Chure/Siwalik or Terai, the sub-basin HUC starts with S followed by two numbers, where "S" indicates the southern rivers (or originating from Chure/Siwalik or Terai) and 01 indicating the Easternmost sub-basin or watershed or sub-watershed (depending upon area threshold as defined in Section 3-2). For example, S01-1 indicates the first sub-basin of the easternmost southern river.

Please refer to Table 4-4 for the key characteristics of each sub-basin in Nepal, Annex 26 for details, and Figure 4-3 for the spatial distribution of hydrological boundaries of the sub-basins.

Table 4-4: Sub-basins in Nepal – name, drainage areas and codes

S.N.	Name of Sub-Basin	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Hydrologic Unit Code
1	Sharada Khola	2	Babai	978	978	BA-I(KA)-1
2	Trishuli Nadi	2	Gandaki	6,607	3,631	GA-2
3	Budhi Gandaki Nadi	2	Gandaki	4,995	3,607	GA-3
4	East Rapti Nadi	2	Gandaki	3,035	3,035	GA-5
5	East Seti Nadi	2	Gandaki	2,936	2,936	GA-6
6	Kali Gandaki Nadi	2	Gandaki	11,878	11,798	GA-1
7	Marsyangdi Nadi	2	Gandaki	4,772	4,772	GA-4
8	Humla Karnali Nadi	2	Karnali	9,104	5,967	KA-2
9	Kawadi Khola	2	Karnali	818	818	KA-8
10	Lohare Khola	2	Karnali	1,017	1,017	KA-6
11	Mugu Karnali Nadi	2	Karnali	5,314	5,314	KA-4
12	West Seti Nadi	2	Karnali	7,370	7,370	KA-3
13	Thuli Gad	2	Karnali	890	890	KA-7
14	Tila Nadi	2	Karnali	3,320	3,320	KA-5
15	Bheri Nadi	2	Karnali	13,626	13,626	KA-1
16	Sunkoshi Nadi	2	Koshi	3389	1395	KO-5
17	Indrawati Nadi	2	Koshi	1227	1227	KO-6
18	Tamor Nadi	2	Koshi	6051	6051	KO-2
19	Trijuga Nadi	2	Koshi	736	736	KO-8
20	Arun Nadi	2	Koshi	29890	5138	KO-1
21	Tamakoshi Nadi	2	Koshi	4121	2675	KO-3
22	Likhu Khola	2	Koshi	1048	1048	KO-7
23	Dudhkoshi Nadi	2	Koshi	4053	4053	KO-4
24	Chamaliya Nadi	2	Mahakali	1590	1590	MA-1
25	Surnaya Gad	2	Mahakali	835	835	MA-2
26	Mohana Nadi	1	-	2508	2508	S53-1
27	Jhimruk Khola	2	West Rapti	1038	1038	WR-I(KA)-2
28	Madi Khola	2	West Rapti	2347	2347	WR-I(KA)-1

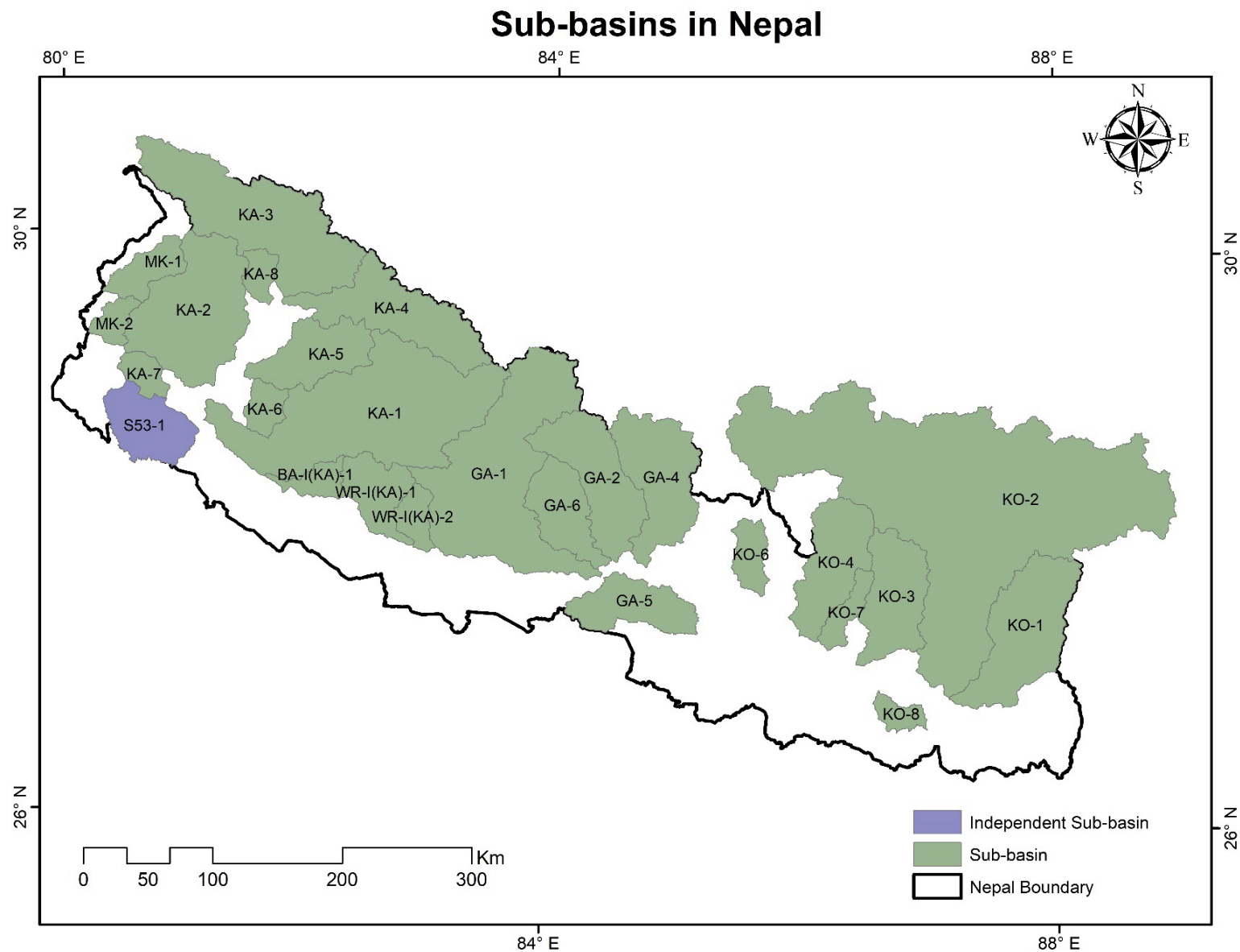


Figure 4-3: Spatial distribution of Sub-Basins in Nepal.

4.4 Watersheds in Nepal

There are 71 watersheds in Nepal, among them, 20 correspond to Level-1 rivers, 17 to Level-2 rivers, and 34 to Level-3 rivers. The Karnali Basin has the largest number (i.e., 15) of watersheds, followed by the Gandaki (12), and Koshi (12). The number of watersheds in remaining basins are 3 in Bagmati (independent), 2 in Mahakali, 2 in Kamala (independent), 1 in West Rapti (independent), and 1 in Tinau (independent). Babai, Kankaimai and Mechi (independent) basins do not have any watersheds. The Mohana, the only one Level-1 sub-basin in Nepal, has three watersheds.

Watersheds are given alpha-numeric HUC. Watersheds within a basin has a HUC of 6-characters length, which is a combination of 4 letter alphanumeric HUC corresponding to the sub-basin it is associated with, followed by a hyphen (-) and a digit with values in a range of 1-n, representing watersheds within the sub-basin based on descending order of the drainage area. For example, KO-1-1 indicates the largest watershed within the largest sub-basin of the Koshi Basin.

Watersheds within a sub-basin of "independent basins" has a HUC of 12 characters length, with a combination of 10 letter alphanumeric HUC corresponding to the sub-basin it is associated with, followed by watershed number assigned in the same manner as did for the watersheds within a sub-basin of a Basin. For example, BG-I(KO)-1-1 indicates the largest watershed within the largest sub-basin of Bagmati (independent) Basin.

There are instances that the basins do not contain any sub-basins or even though the basins contain sub-basins, some watersheds are not contained within the hydrological boundary of sub-basins. The digit 0 (zero) has been assigned in the placeholder of sub-basin in the code which previously held a digit of "1-n" in descending order of the sub-basin area within each basin. For example, KO-0-1 indicates the largest watershed within the Koshi Basin which is not within any sub-basin of the Koshi Basin.

For watersheds within sub-basin originating from Chure/Siwalik or Terai, the sub-basin HUC starts with S followed by two numbers, where "S" indicates the southern rivers (or originating from Chure/Siwalik or Terai) and 01 indicating the Easternmost sub-basin or watershed or sub-watershed (depending upon area threshold as defined in Section 3-2), as described in Section 4.3 above. In this context, a HUC of S01-1-1 indicates the largest watershed within the first sub-basin within the southern rivers. In case a watershed does not fall within the hydrological boundary of the sub-basin, the digit 0 (zero) has been assigned in the placeholder of sub-basin in the code which previously held a digit of "1-n". For example, a HUC S02-0-1 indicates a watershed of the second southern river of Level-1, counted from the East to West of Nepal.

Please refer to Table 4-5 for the key characteristics of each watershed, Annex 27 for details, in Nepal and Figure 4-4 for the spatial distribution of hydrological boundaries of the watersheds.

Table 4-5: Watersheds in Nepal – names, drainage areas and codes

SN	Name of Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1	Badahar Nadi	1	-	322	322	S21-0-16
2	Jhanjh Nadi	2	Bagmati	330	330	BG-I(KO)-0-3
3	Kakhajor Khola	2	Bagmati	355	355	BG-I(KO)-0-2
4	Marin Khola	2	Bagmati	538	538	BG-I(KO)-0-1
5	Bakara Nuna Nadi	1	-	394	394	S06-0-12
6	Bakraha Nadi	1	-	473	473	S07-0-08
7	Balan Nadi	1	-	439	439	S18-0-10
8	Banaganga Nadi	1	-	995	995	S49-0-01
9	Bigahi Nadi	1	-	902	902	S22-0-02
10	Biring Nadi	1	-	361	361	S02-0-13
11	Budhi Khola	1	-	305	305	S10-0-19
12	Chaudara Nadi	1	-	485	485	S55-0-06
13	Doda Nadi	1	-	835	835	S54-0-04
14	Madi Nadi	3	Gandaki	1117	1117	GA-6-1
15	Daraundi Nadi	3	Gandaki	606	606	GA-4-2
16	Nar Khola	3	Gandaki	881	881	GA-4-1
17	Syar Khola	3	Gandaki	640	640	GA-3-2
18	Akhu Khola	3	Gandaki	748	748	GA-3-1
19	Langtang Khola	3	Gandaki	578	578	GA-2-2
20	Tadi Khola	3	Gandaki	663	663	GA-2-1
21	Ridi Khola	3	Gandaki	598	598	GA-1-4
22	Modi Khola	3	Gandaki	672	672	GA-1-3
23	Myagdi Khola	3	Gandaki	1089	1089	GA-1-2
24	Badigad Khola	3	Gandaki	1986	1986	GA-1-1
25	Binayi Khola	2	Gandaki	327	327	GA-0-1
26	Jharahi-Bhaluhi Nadi	1	-	315	315	S43-0-17
27	Chadaha Khola	2	Kamala	306	306	KM-I(KO)-0-2
28	Tawa Khola	2	Kamala	476	476	KM-I(KO)-0-1
29	Juwa Nadi	3	Karnali	549	549	KA-5-2
30	Hima Nadi	3	Karnali	807	807	KA-5-1
31	Mugu Khola	3	Karnali	766	766	KA-4-2
32	Namlang Nadi	3	Karnali	3530	3530	KA-4-1
33	Kalanga Nadi	3	Karnali	558	558	KA-3-2
34	Budhi Ganga Nadi	3	Karnali	1739	1739	KA-3-1

SN	Name of Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
35	Limi Khola	3	Karnali	1146	1146	KA-2-3
36	Chuwa Khola	3	Karnali	1300	1300	KA-2-2
37	Loti Karnali Nadi	3	Karnali	1304	1304	KA-2-1
38	Jagdula Khola	3	Karnali	514	514	KA-1-5
39	Nalsyagu Khola	3	Karnali	680	680	KA-1-4
40	Chhera Khola	3	Karnali	1016	1016	KA-1-3
41	Sani Bheri Nadi	3	Karnali	2725	2725	KA-1-2
42	Thuli Bheri Nadi	3	Karnali	4439	4439	KA-1-1
43	Orai Khola	2	Karnali	309	309	KA-0-1
44	Balephi Khola	3	Koshi	683	683	KO-5-1
45	Solu Khola	3	Koshi	533	533	KO-4-2
46	Hongu Khola	3	Koshi	604	604	KO-4-1
47	Mewa Khola	3	Koshi	580	580	KO-2-3
48	Ghunsa Khola	3	Koshi	743	743	KO-2-2
49	Kabeli Nadi	3	Koshi	887	887	KO-2-1
50	Sabha Khola	3	Koshi	551	551	KO-1-2
51	Pikhuwa Khola	3	Koshi	584	584	KO-1-1
52	Chauri Khola	2	Koshi	327	327	KO-0-4
53	Sapsup Khola	2	Koshi	358	358	KO-0-3
54	Malung Khola	2	Koshi	411	411	KO-0-2
55	Rosi Khola	2	Koshi	562	562	KO-0-1
56	Kothi Nadi	1	-	303	303	S47-0-20
57	Lakhandehi Nadi	1	-	313	313	S27-0-18
58	Lal Bakaiya Nadi	1	-	852	852	S28-0-03
59	Lohandra Nadi	1	-	330	330	S08-0-15
60	Tingkar Khola	2	Mahakali	344	344	MA-0-2
61	Rangun Khola	2	Mahakali	478	478	MA-0-1
62	Man Khola	1	-	624	624	S52-0-05
63	Kandra Nadi	2	-	495	495	S53-1-02
64	Khutiya Nadi	2	-	321	321	S53-1-03
65	Pathari Nadi	2	-	642	642	S53-1-01
66	Ratu Nadi	1	-	480	480	S23-0-07
67	Ratuwa Khola	1	-	356	356	S05-0-14
68	Sunsari Khola	1	-	432	432	S12-0-11
69	Tilabe Nadi	1	-	445	445	S34-0-09
70	Dano Nadi	2	Tinau	458	458	TI-I(KA)-0-1
71	Lungri Khola	3	West Rapti	636	636	WR-I(KA)-1-1

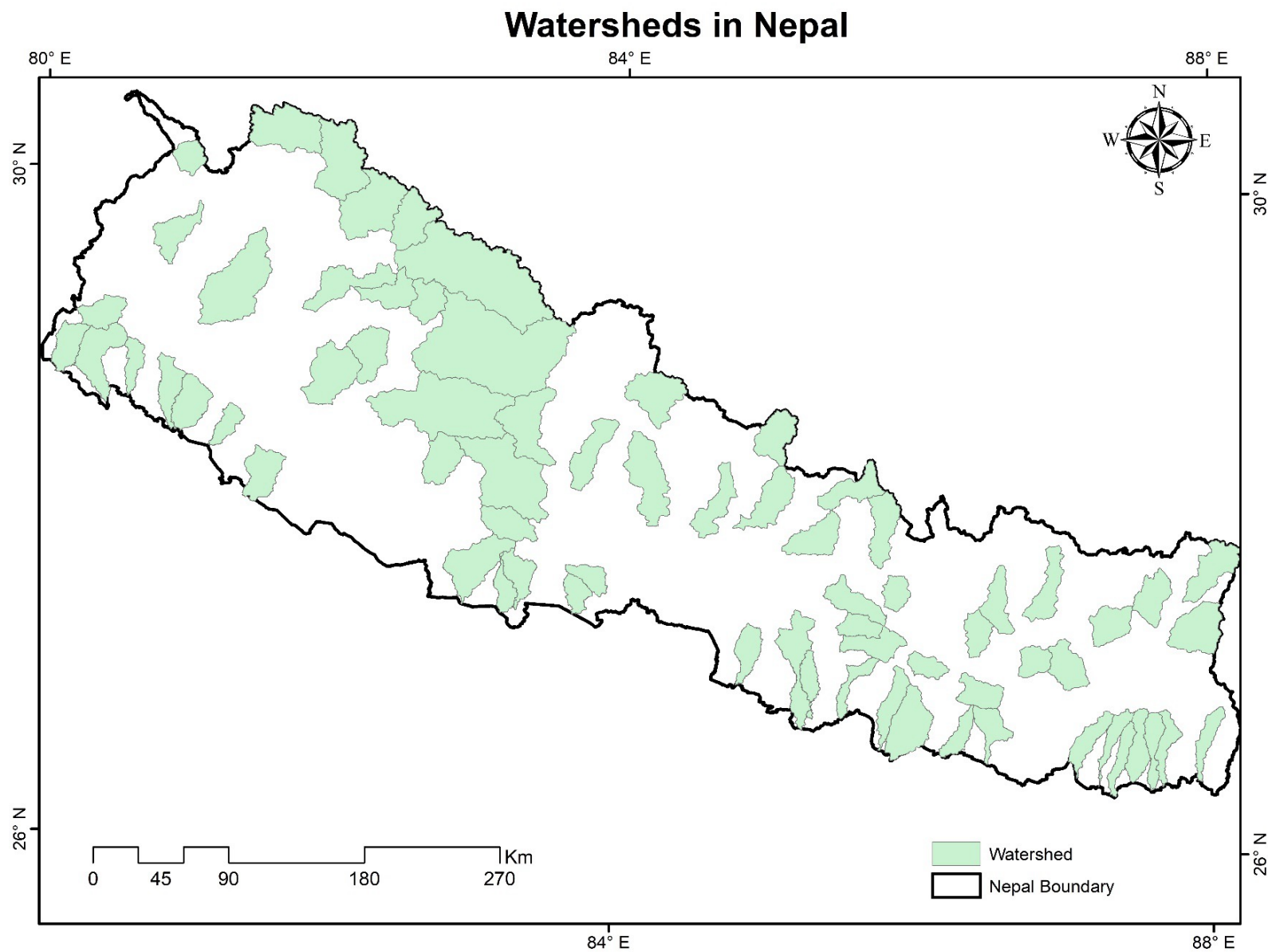


Figure 4-4: Spatial distribution of Watersheds in Nepal.

4.5 Sub-Watersheds in Nepal

There are 1,180 sub-watersheds in Nepal, among them, 34 correspond to the Level-1 rivers, 289 to the Level-2 rivers, 574 to the Level-3 rivers and 283 to the Level-4 rivers. The Karnali Basin has the largest number (i.e., 320) of sub-watersheds, followed by the Gandaki Basin (264 numbers), and the Koshi Basin (241 numbers). The number of sub-watersheds in remaining basins are 57 in the Mahakali Basin, 55 in the West Rapti (independent) Basin, 29 in the Babai (independent) Basin, 29 in the Bagmati (independent) Basin, 20 in the Kamala (independent) Basin, 14 in the Kankaimai (independent) Basin, 8 in the Tinau (independent) Basin, and 5 in the Mechi (independent) Basin. The Mohana, the only Level-1 sub-basin in Nepal, has three sub-watersheds. The remaining 140 sub-watersheds fall within the watersheds corresponding to the Level-1 rivers in the southern-plain, also called as the "southern rivers".

The sub-watersheds are given alpha-numeric HUC. Sub-watersheds within a sub-basin of a Basin have a HUC of 9-characters length, which is a combination of 6 letter alphanumeric HUC corresponding to the watershed it is associated with, followed by a hyphen (-) and a digit with values in a range of "1-n", representing sub-watersheds within the watershed based on descending order of the drainage area. For example, KO-1-1-01 indicates the largest sub-watershed within the largest watershed within the largest sub-basin of the Koshi Basin in Nepal.

The sub-watersheds within a watershed of "independent basins" has a HUC of 15-characters length, with a combination of 12 letters alphanumeric HUC corresponding to the watershed of the independent basin it is associated with, followed by the sub-watershed number assigned in the same manner as did for sub-watersheds within a watershed of a Basin. For example, BG-I(KO)-1-1-01 indicates the largest sub-watershed within the largest watershed within the largest sub-basin of the Bagmati (independent) basin.

Like in the watersheds, there are instances that the basins do not contain any sub-basins, the basins contain sub-basins but do not contain any watershed or even though the basins contain sub-basins and watershed within sub-basins, some sub-watersheds are not contained within the hydrological boundary of the watersheds. This has resulted three more types of sub-watersheds in addition to the regular one, thus, requiring customizing code a bit to those three types of sub-watersheds: i) sub-watersheds not contained within any watersheds that fall within sub-basin of a basin, ii) sub-watersheds contained within watersheds that are not contained within the sub-basins, iii) sub-watershed not contained within any watersheds or sub-basins.

- For the first type of sub-watersheds, the digit 0 (zero) has been assigned in the placeholder of sub-watershed code which previously held a digit of "1-n" in descending order of the area of watershed within each sub-basin of a basin. For example, KO-1-0-01 indicates the largest sub-watershed not contained within any watersheds of the largest sub-basin of the Koshi Basin.
- For the second type of sub-watersheds, the digit 0 (zero) has been assigned in the placeholder of sub-watershed code which previously held a digit of "1-n"

in descending order of area of sub-basins within a basin. For example, KO-0-1-01 indicates the largest sub-watershed within the largest watershed of the Koshi Basin but not contained within any sub-basins.

- For the third type of sub-watersheds, the digit 0 (zero) has been assigned in the placeholder of sub-watershed code which previously held a digit of "1-9" in descending order of area of sub-basins within a basin and watershed within a sub-basin. For example, KO-0-0-01 indicates the largest sub-watershed within the Koshi Basin but not contained within any sub-basin or watershed.

For the sub-watersheds within watersheds of a sub-basin originating from Chure/Siwalik or Terai region, the sub-basin HUC starts with S followed by two numbers, where "S" indicates the southern rivers (or originating from Chure/Siwalik or Terai) and 01 indicating the Easternmost sub-basin or watershed or sub-watershed (depending upon area threshold as defined in Section 3-2). In this context, S01-1-1-1 indicates the largest sub-watershed within the largest watershed within the largest sub-basin of the first southern river of Level-1, counted from the East to West of Nepal.

The HUC for the sub-watersheds within a watershed which are not within the sub-basin of southern river is assigned as in this example, S02-0-1-1, which indicates the largest sub-watershed within the largest watershed of the second southern river of Level-1, counted from the East to West of Nepal.

The HUC for the sub-watersheds in southern part of the country not contained within any sub-basin or watersheds is assigned as shown in this example, S03-0-0-1, which indicates the largest sub-watershed not contained within any watershed and sub-basin of the third southern river of Level-1, counted from the East to West of Nepal.

Please refer to Annex-1 for the key characteristics of each sub-watershed in Nepal and Figure 4-4 for the spatial distribution of hydrological boundaries of the sub-watersheds.

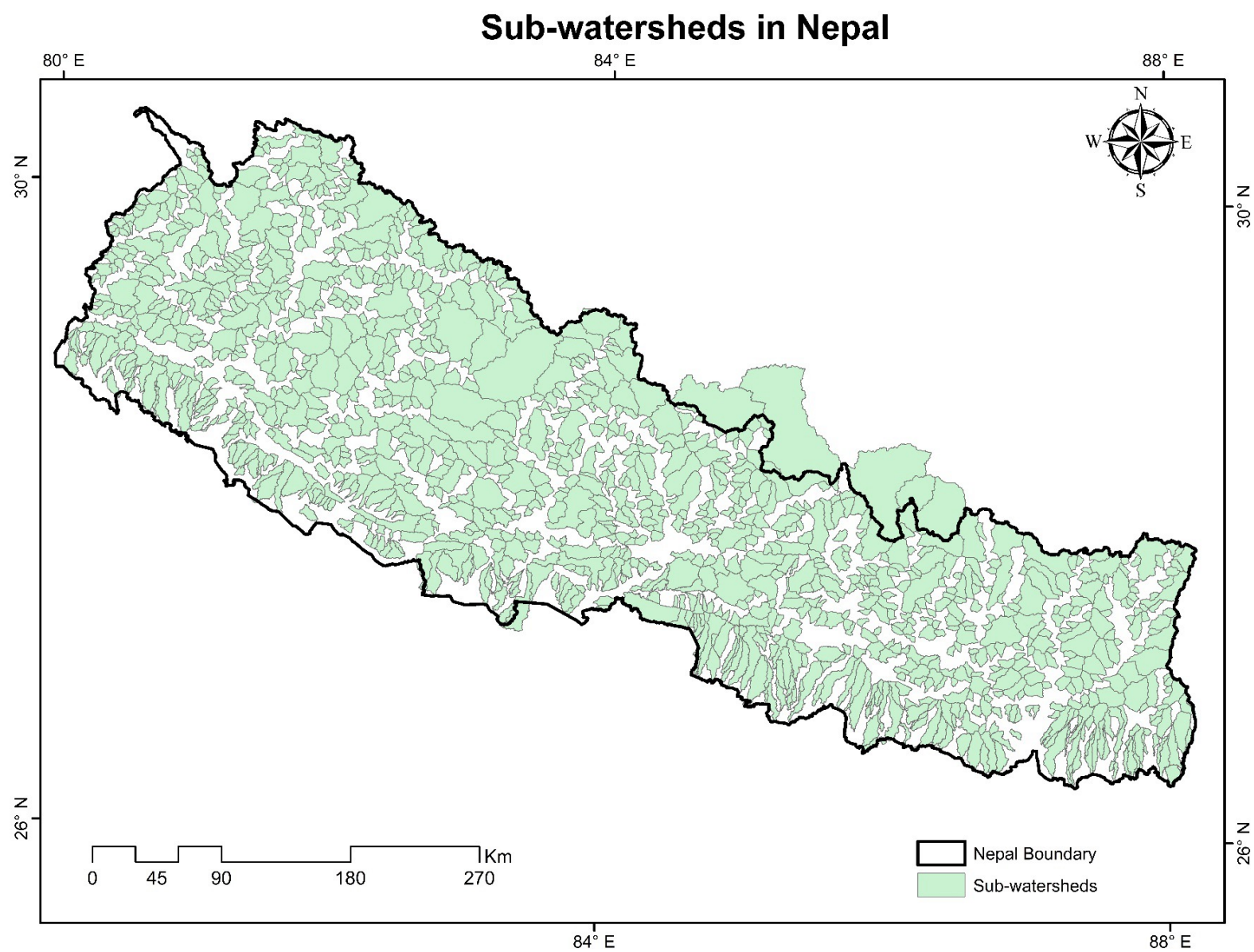


Figure 4-5: Spatial distribution of Sub-Watersheds in Nepal.

4.6 Inter-Watershed areas and Directly Contributing Areas

The areas which are not included in aforementioned types of HUs are named as 'inter-watershed area'. There is a total of 3,719 km² under "inter-watershed areas" in Nepal which lie across the southern part of the country along the Nepal-India border.

Furthermore, in the process of mapping of sub-basins, watersheds, and sub-watersheds in a basin, there are some areas which are counted in total basin areas but do not fall within sub-basin or watershed or sub-watershed due to non-compliance of a true hydrological boundary required for a HU. They are named as "directly contributing areas". The "directly contributing areas" do not make any significance in naming or coding a HU, but need to be considered to have a total accounting of the drainage area of the entire basin. The "directly contributing areas" in all 11 basins (including, 7 independent basins) are provided in Table 4-6.

Table 4-6: Directly contributing areas within 11 Basins in Nepal

S.N.	Basin Name	Directly Contributing Area (km ²)
1	West Rapti	1,034
2	Mechi	113
3	Karnali	1,796
4	Gandaki	868
5	Mahakali	2,417
6	Bagmati	702
7	Koshi	1,766
8	Babai	985
9	Kamala	509
10	Tinau	322
11	Kankaimai	1,180

5. HYDROLOGICAL UNITS ACROSS THE BASINS IN NEPAL

There are 11 basins in Nepal; seven (7) of them are defined as “independent basins”. Four basins are of relatively larger size, and transboundary in nature. The Koshi, Gandaki, Karnali and Mahakali are the transboundary basins, with 49.3%, 87.8%, 92.5%, and 33.0% of headwaters beyond Nepal’s boundary (Table 4-3). All of those basins join the Ganges River after passing the Nepal-India border. The river systems in Nepal contribute about 70% of the total lean season flow and 47% of the total annual flow at the Ganges River at Farakka. Overall regional context of the basins in Nepal is shown in Figure 5-1. Following sub-chapters describe distribution of basin-wise distribution of hydrological units (HUs) with specific focus on the HUs that lie Nepal. And Figure 5-2 depicts coding schema shown in the maps presented in this Chapter.

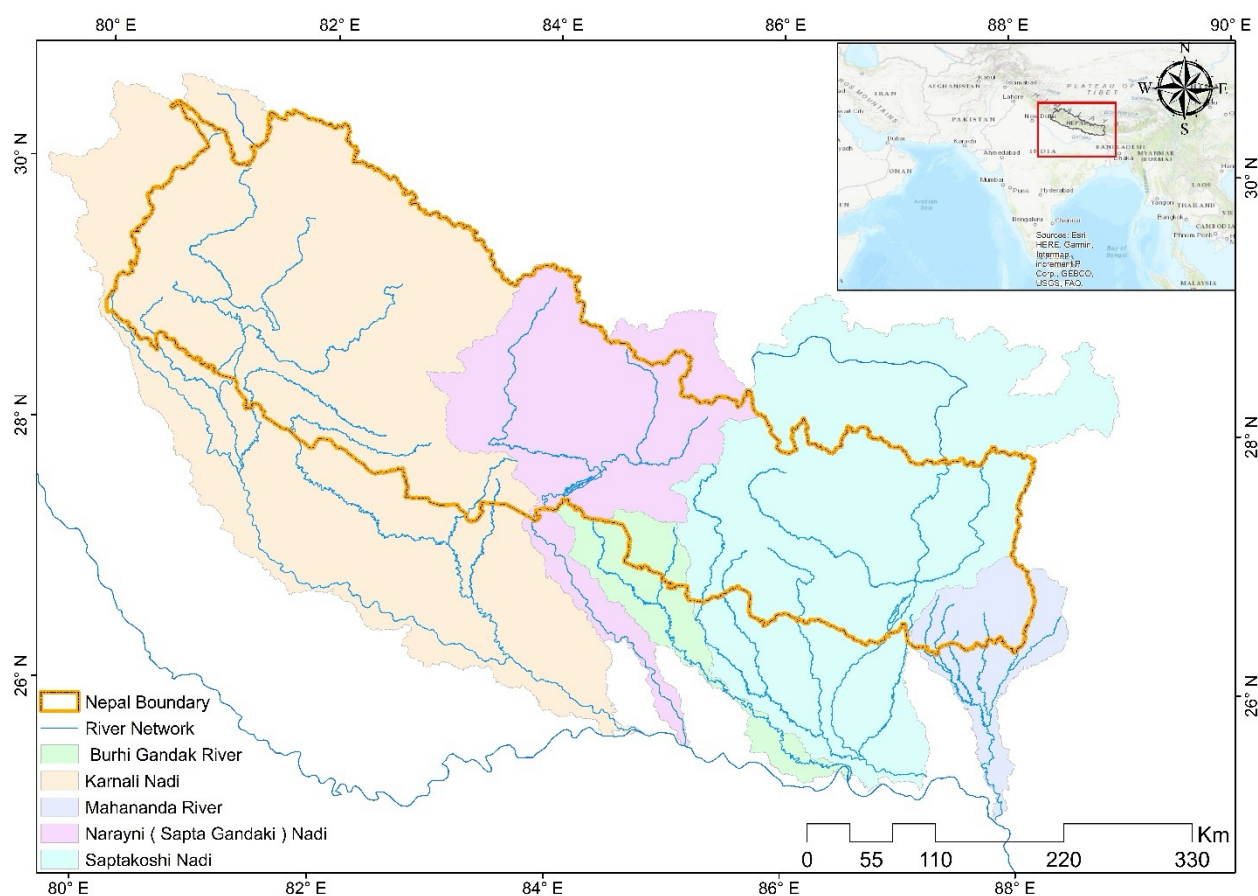


Figure 5-1: Overall regional context of the basins in Nepal

Coding Schema

Coding System : KA-3-X-XX

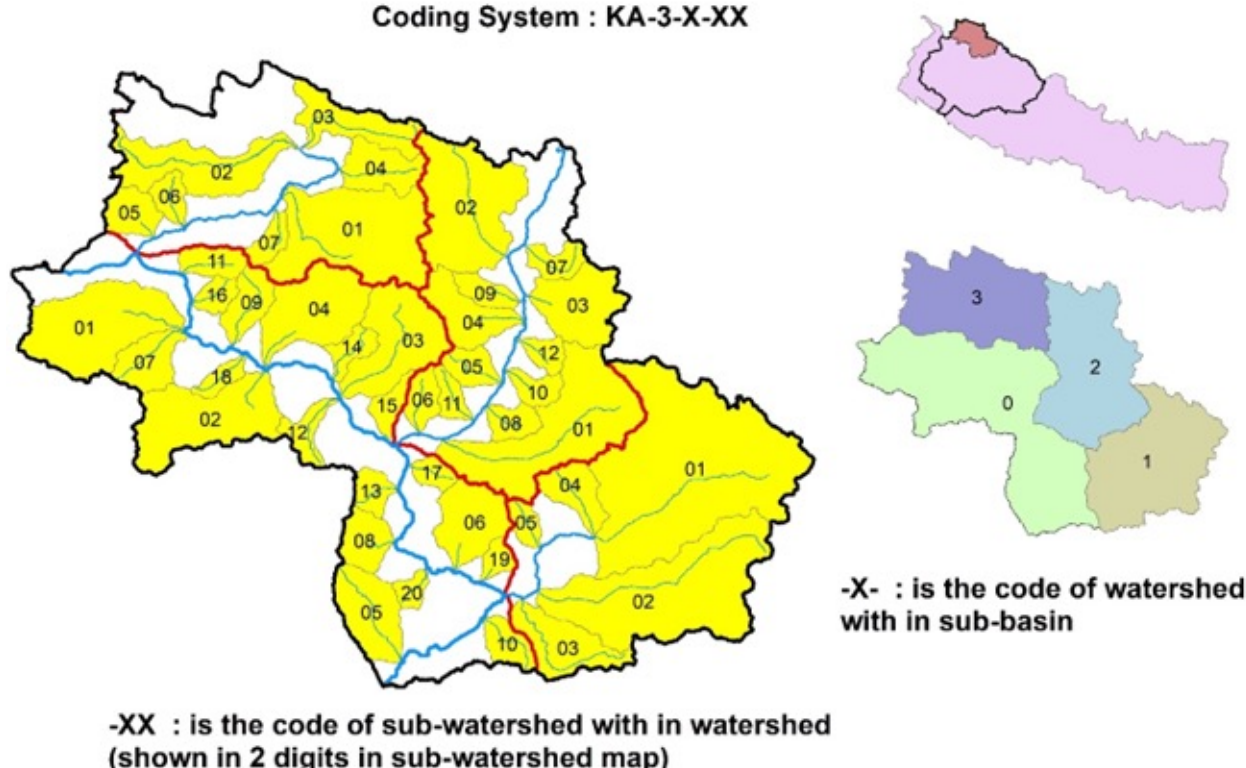


Figure 5-2: Coding schema for hydrological units in Nepal

5.1 Karnali Basin

The Karnali Basin, located in the western region of Nepal, includes districts such as Humla, Jumla, Mugu, Kalikot, Bajura, Bajhang, Dailekh, Jajarkot, Surkhet, and Bardiya. This basin is drained by the Karnali River, which is the longest river in Nepal having drainage area of 46,472 km², of which, 43,153 km² fall within Nepal. Originating from the Tibetan plateau, the Karnali River flows southward through the rugged and remote terrains of the Himalayas, descending into the lower hills and plains. The basin shares its borders with the Himalayan range in the north and extends towards the southern lowlands, eventually joining the Ganges in India. The major tributaries of the Karnali Basin are West-Seti, Bheri, Mugu Karnali, Humla Karnali, Tila and Thuligad rivers, which originate from various parts of the High Himalayas.

The Karnali Basin has 47 rivers of Level-2 with area ranging from 20 to 13,626 km², 162 rivers of Level-3 with area ranging from 20 to 4,439 km², and 134 rivers of Level-4 with area ranging from 20 to 1,863 km². The Karnali basin has 8 sub-basins with area range of 824 – 13626 km², 15 watersheds with area range of 309 – 4439 km² and 320 sub-watersheds with area range 120 – 1863 km². The rivers of different levels (Level-2 to Level-4) in the Karnali Basin is tabulated in Annex 2 and the details of sub-basins, watersheds and sub-watersheds within the Karnali Basin in Annex 3. Figure 5-3 to Figure 5-11 depict mapping of HUs in the Karnali Basin.

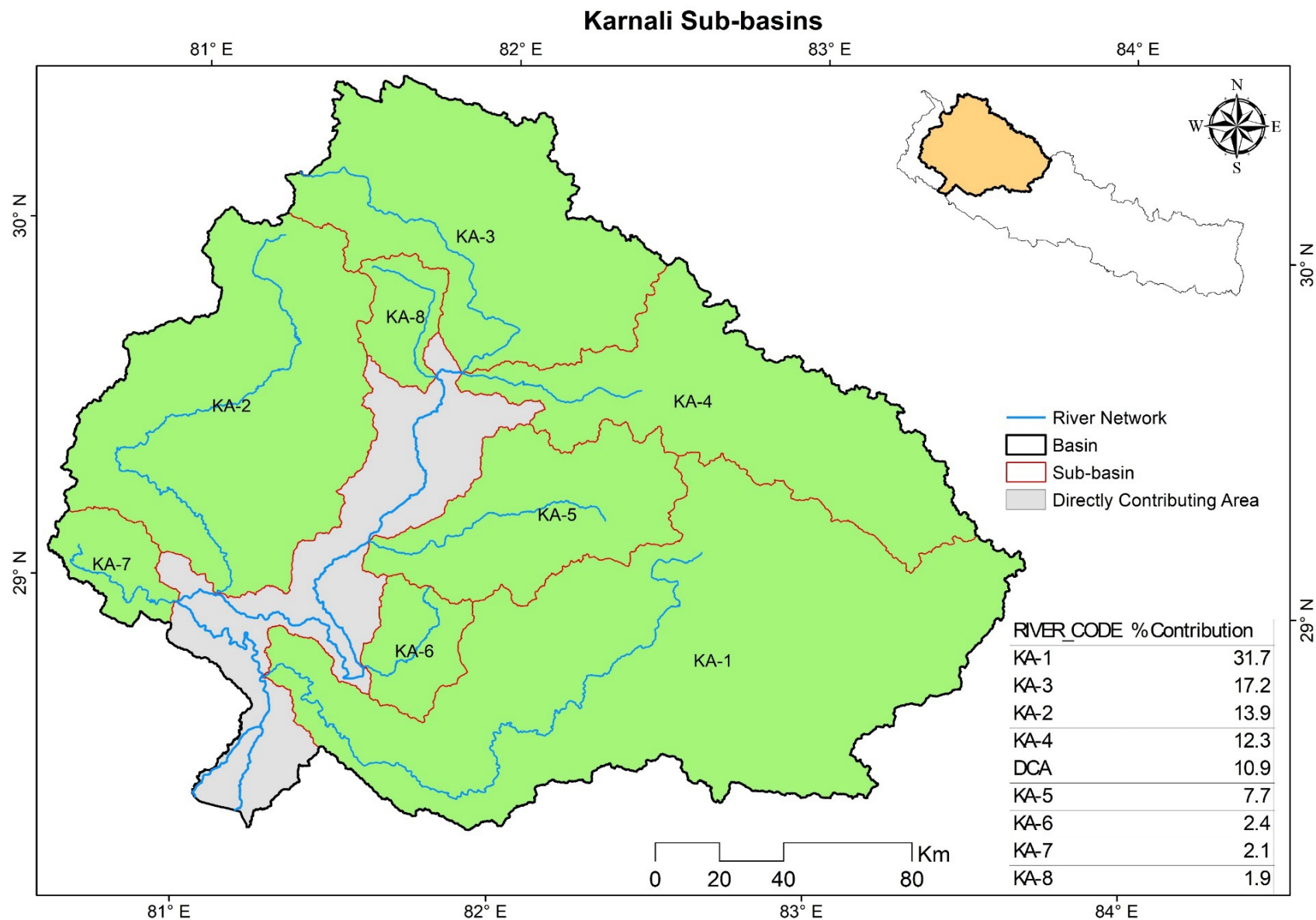


Figure 5-3: Sub-basins in the Karnali Basin in Nepal

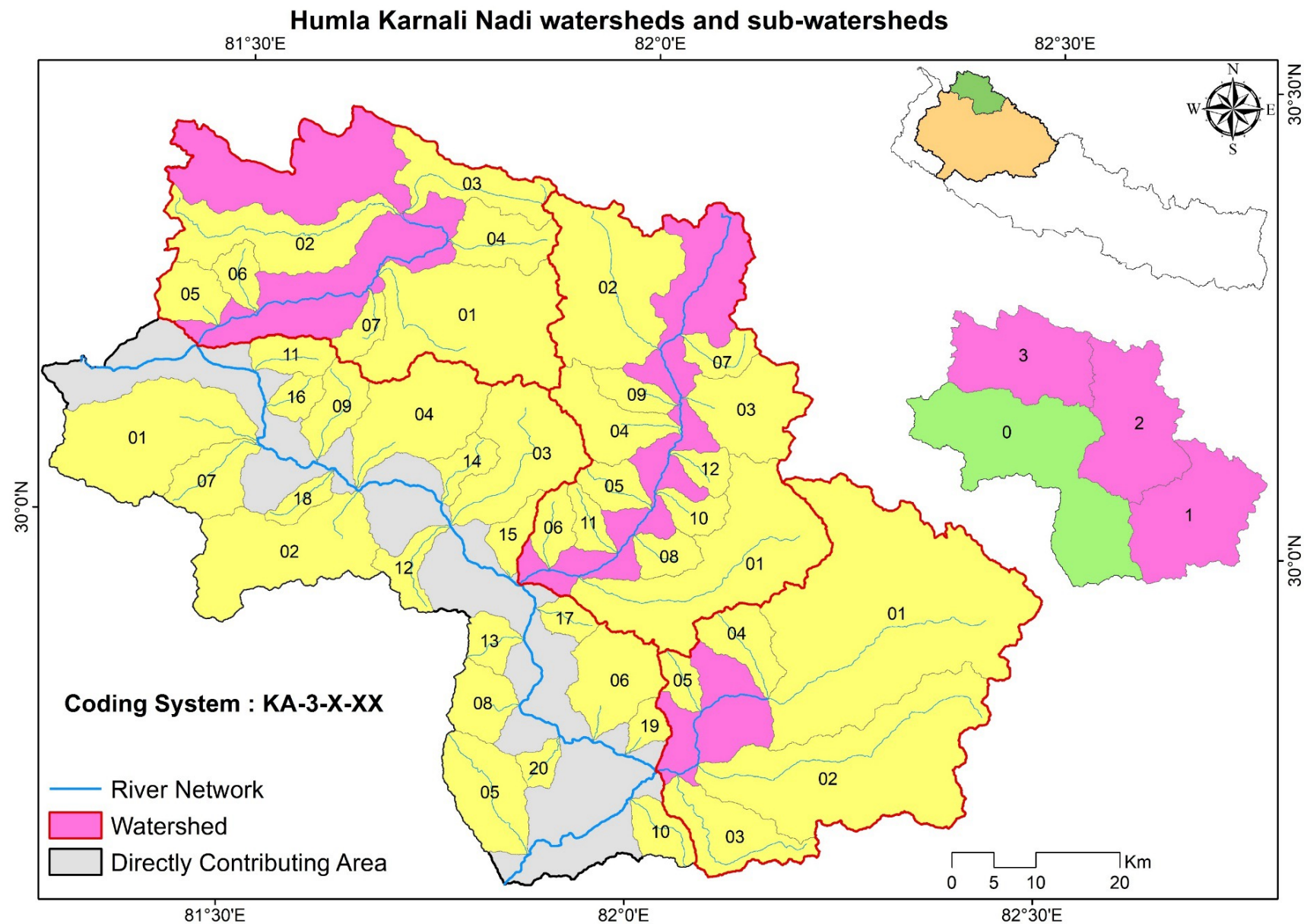


Figure 5-4: Watersheds and sub-watersheds in the Humla Karnali sub-basin in the Karnali Basin, Nepal

Mugu Karnali Nadi watersheds and sub-watersheds

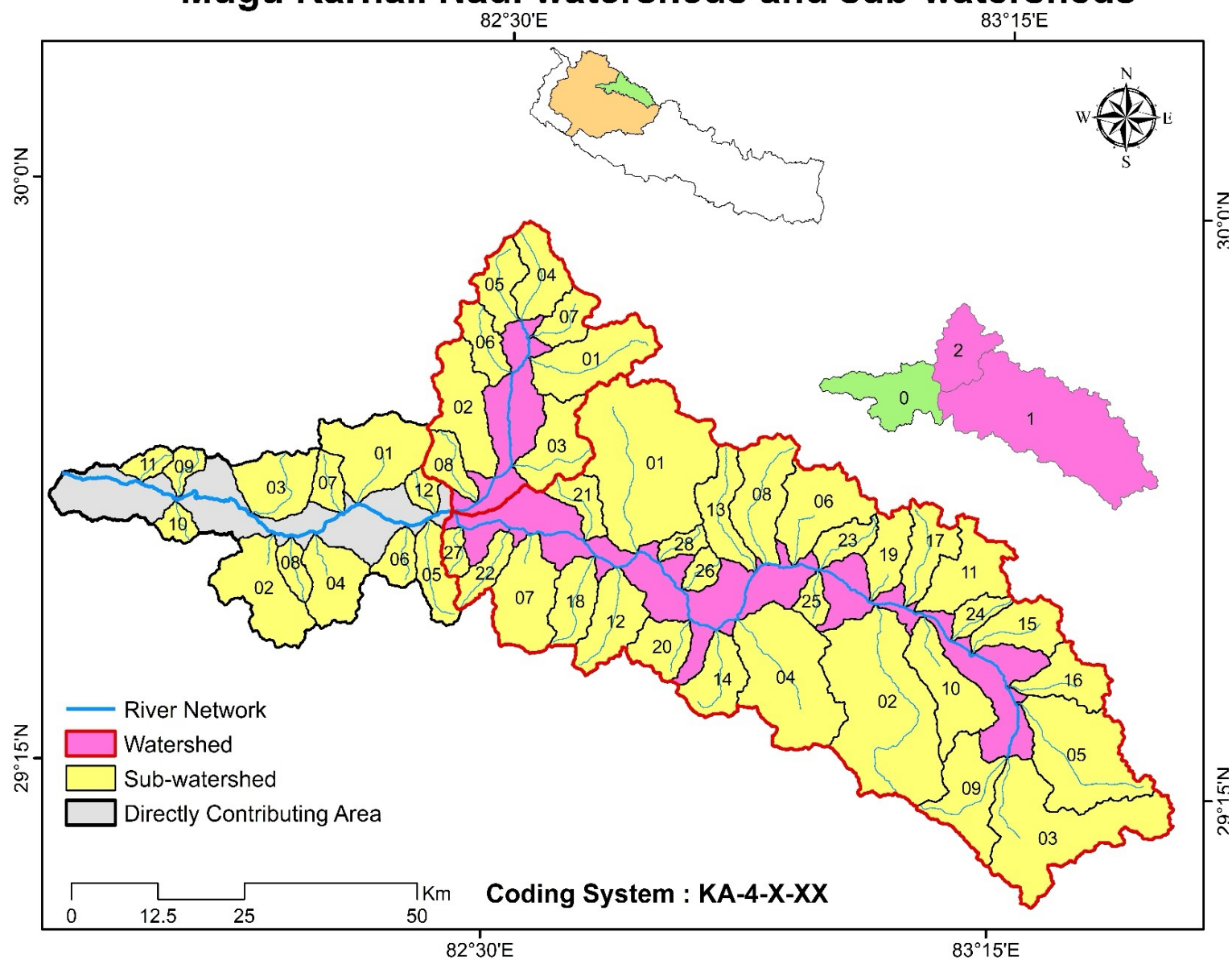


Figure 5-5: Watersheds and sub-watersheds in the Mugu Karnali sub-basin in the Karnali Basin, Nepal

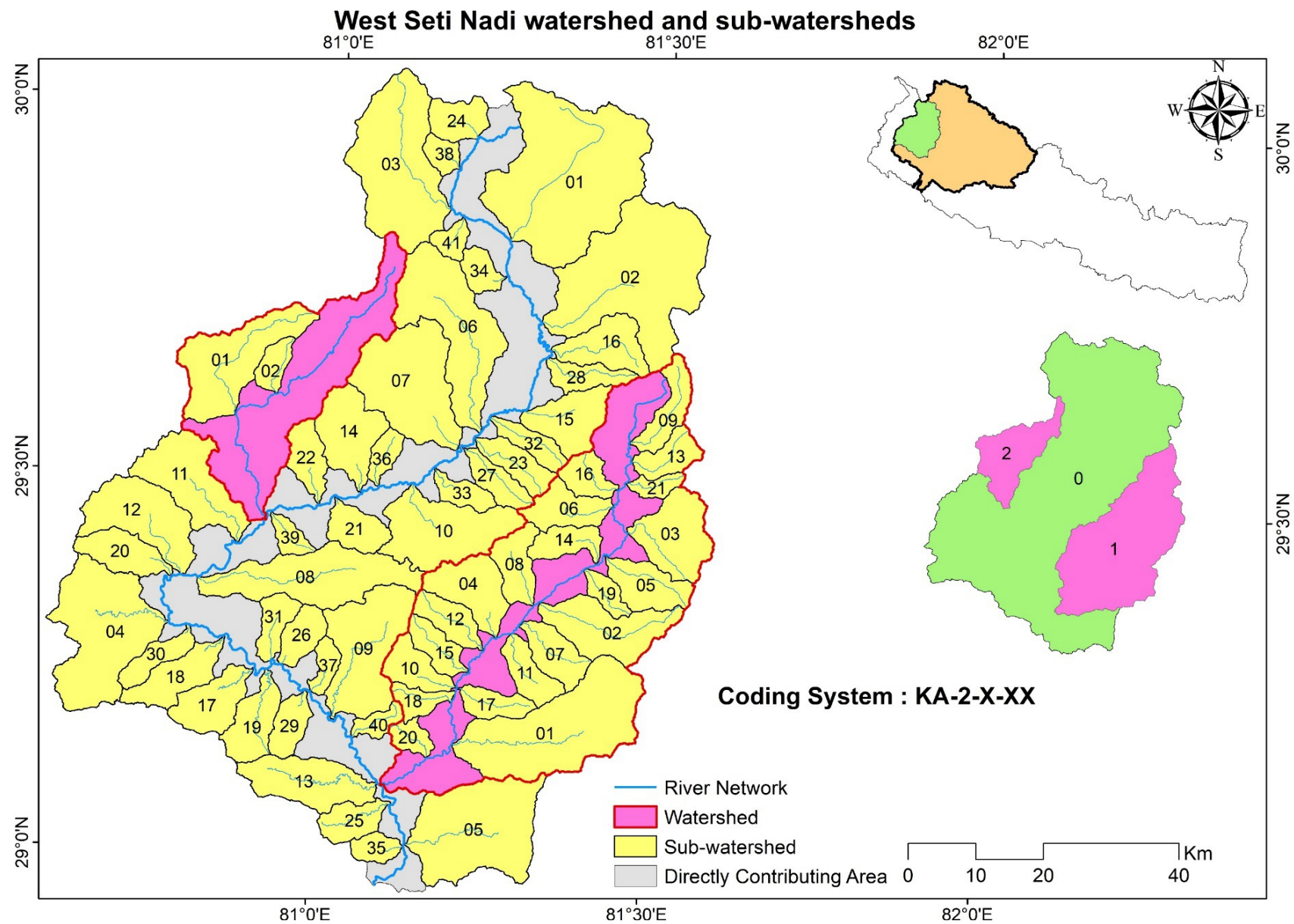


Figure 5-6: Watersheds and sub-watersheds in the West Seti sub-basin in the Karnali Basin, Nepal

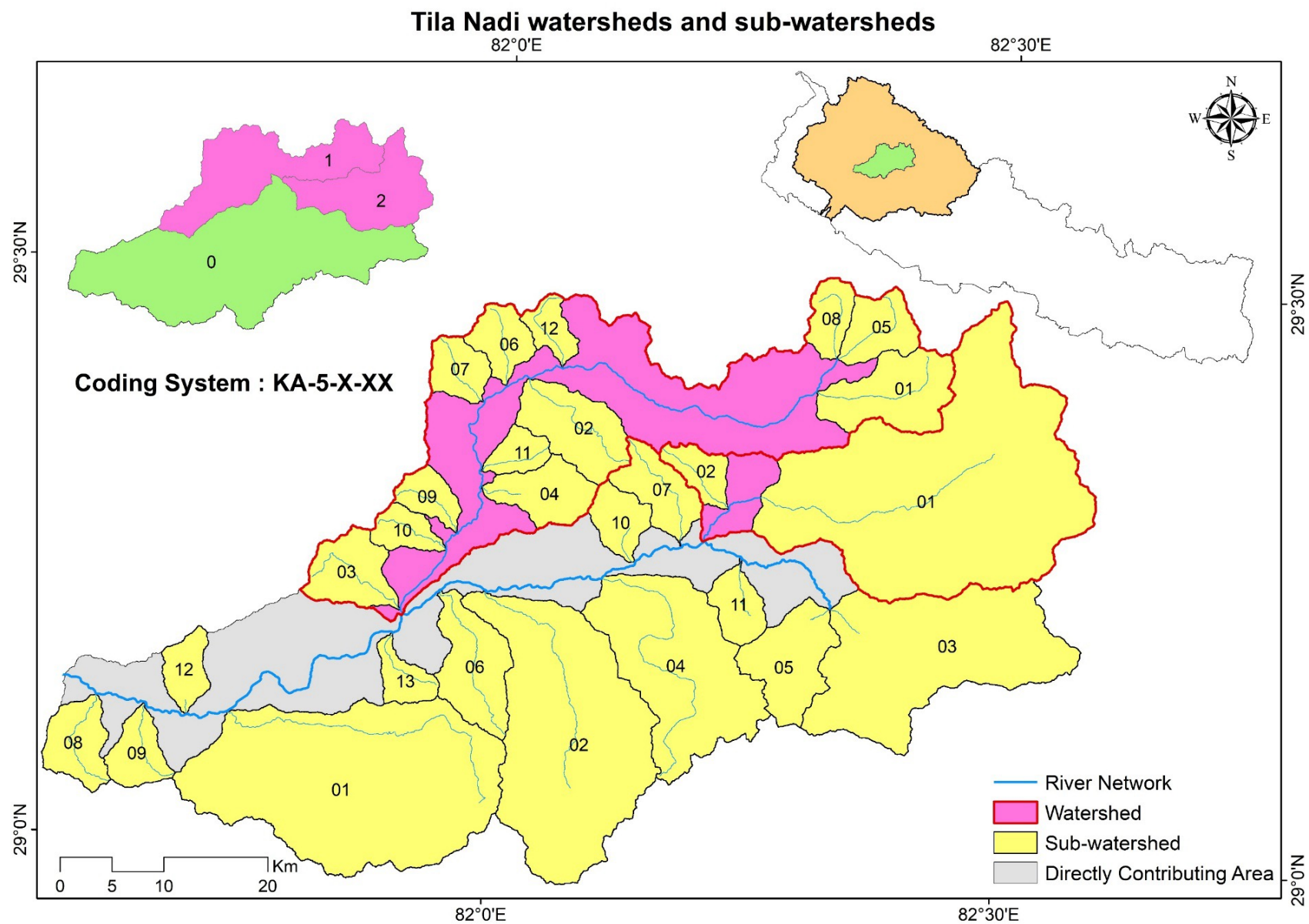


Figure 5-7: Watersheds and sub-watersheds in the Tila sub-basin in the Karnali Basin, Nepal

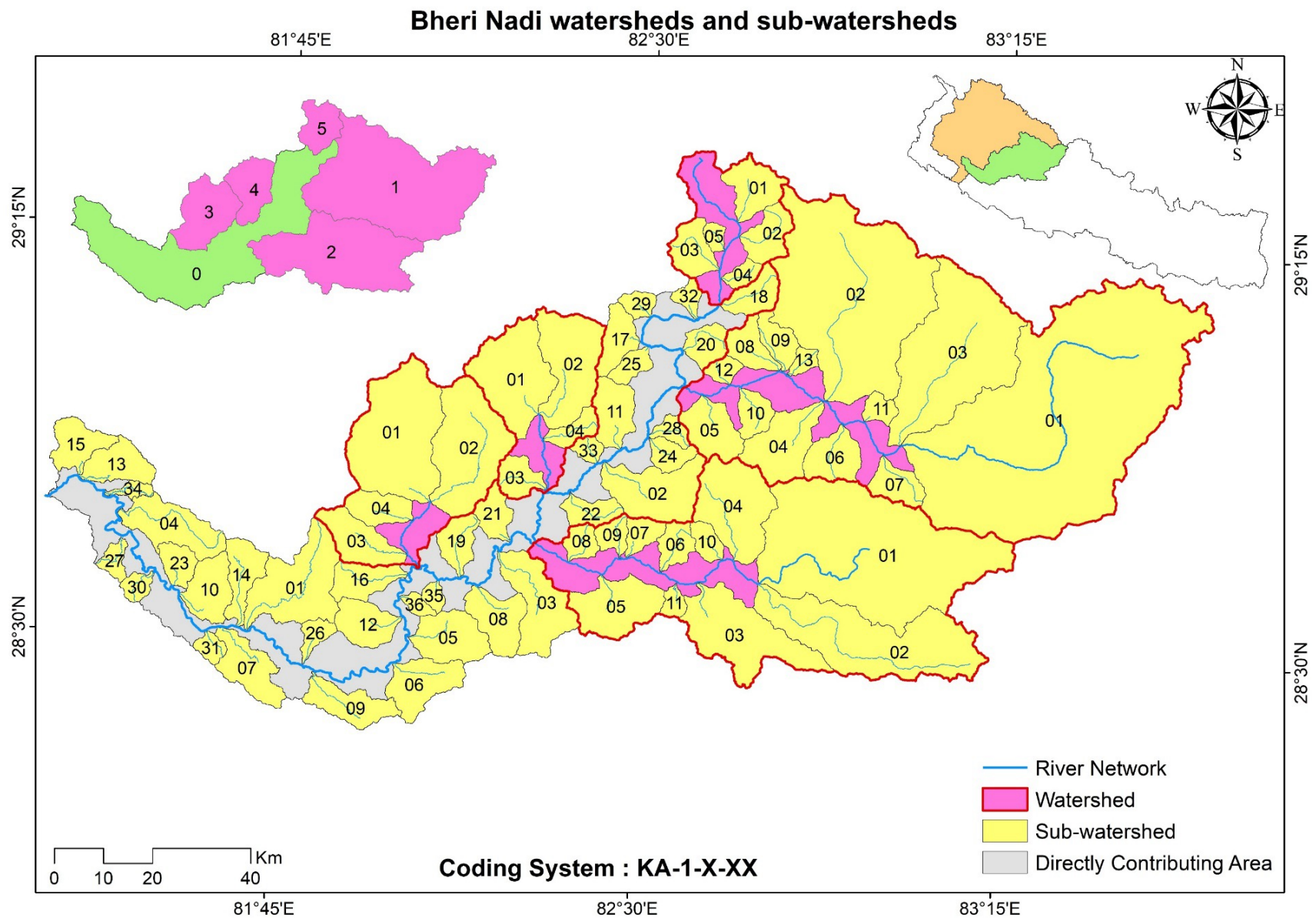


Figure 5-8: Watersheds and sub-watersheds in the Bheri sub-basin in the Karnali Basin, Nepal

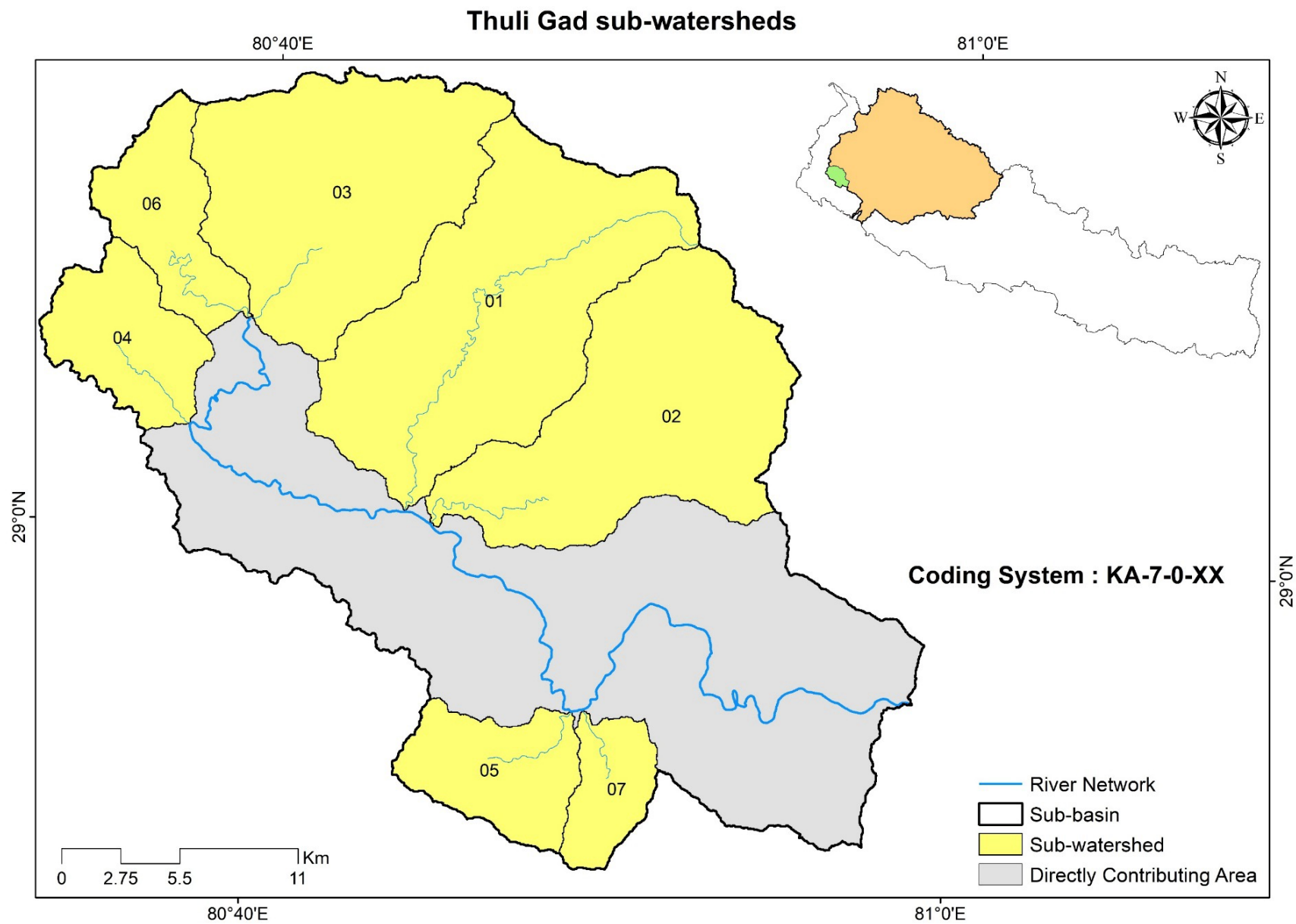


Figure 5-9: Sub-watersheds in the Thuli Gad in the Karnali Basin, Nepal

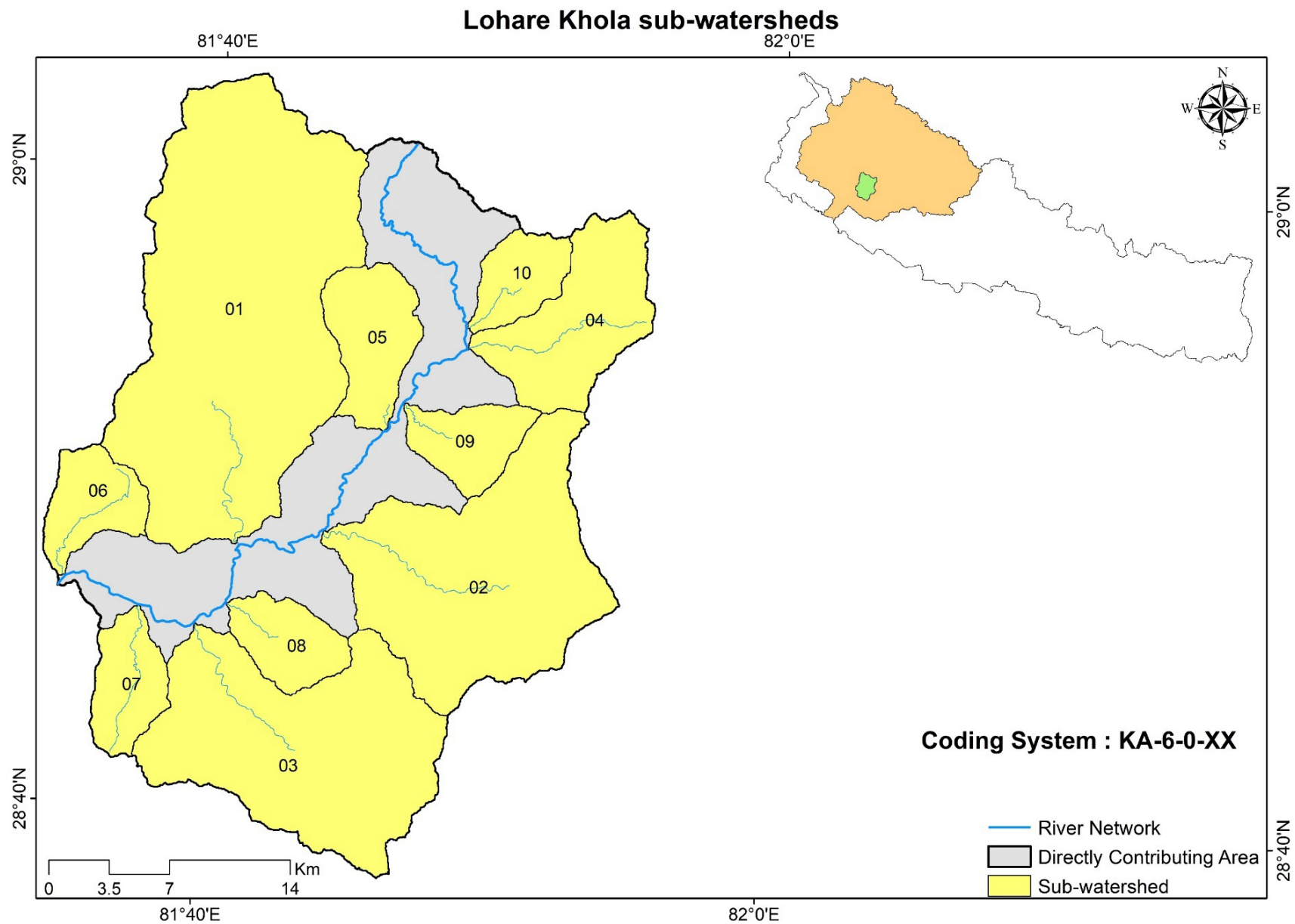


Figure 5-10: Sub-watersheds in the Lothar Khola in the Karnali Basin, Nepal

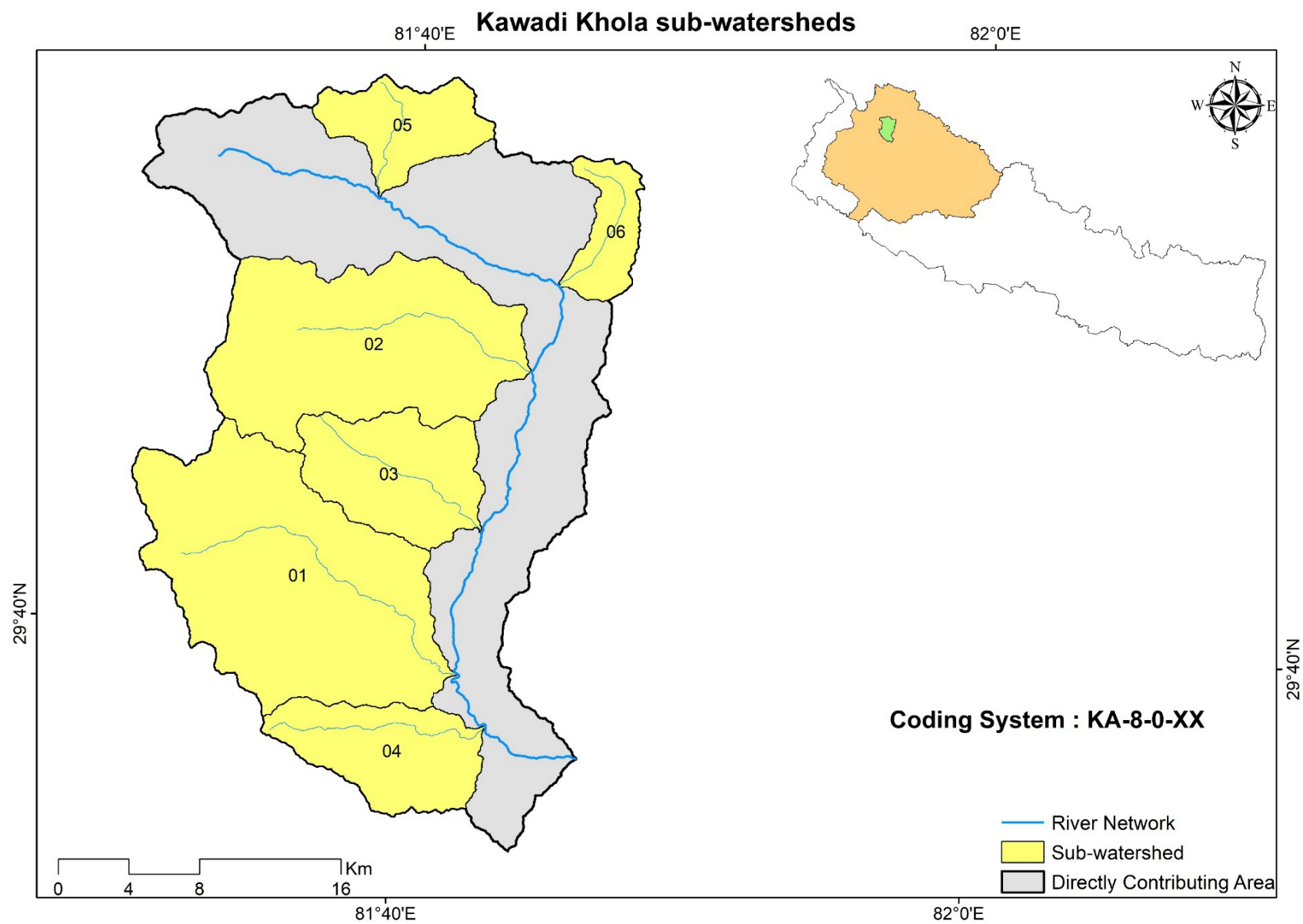


Figure 5-11: Sub-watersheds in the Kawadi Khola in the Karnali Basin, Nepal

5.2 Gandaki Basin

The Gandaki Basin, located in the central part of Nepal, encompasses several districts including Mustang, Manang, Kaski, Lamjung, Gorkha, Syangja, Tanahun, Nawalparasi Susta East and Chitwan. The basin is drained out by the Gandaki River, one of the major rivers in Nepal, which flows from the northern Himalayas down to the plains of the Terai and has a total drainage area of 36,502 km², out of which, 32,034 km² lies within in Nepal. The Gandaki (or Saptagandaki) River, also known as the Narayani in its lower reaches, traverses diverse landscapes ranging from high-altitude glaciers to lush green valleys and fertile lowlands. It shares borders with the Dhaulagiri and Annapurna Mountain ranges to the west and the Mahabharat Range to the south. The Gandaki River is formed by the confluence of several tributaries, each originating from the High Himalayan region. Major tributaries of the Gandaki include the Kali Gandaki, Marshyangdi, East Seti, Budhi Gandaki, Trishuli, and East Rapti rivers.

The Gandaki Basin has 22 rivers of Level-2 with area ranging from 21 to 18,878 km², 173 rivers of Level-3 with area ranging from 20 to 1,986 km² and 87 rivers of Level-4 with area range of 20 - 453 km². The Gandaki Basin has 6 sub-basins with area range of 2936 -11878 km², 12 watersheds with area range of 328 - 1986 km² and 264 sub-watersheds with area range 20 - 477 km².

The rivers of different levels (Level-2 to Level-4) in the Gandaki Basin is tabulated in Annex 4 and the details of sub-basins, watersheds and sub-watersheds within the Gandaki Basin in Annex 5. Figure 5-12 to Figure 5-18 depict mapping of HUs in the Gandaki Basin.

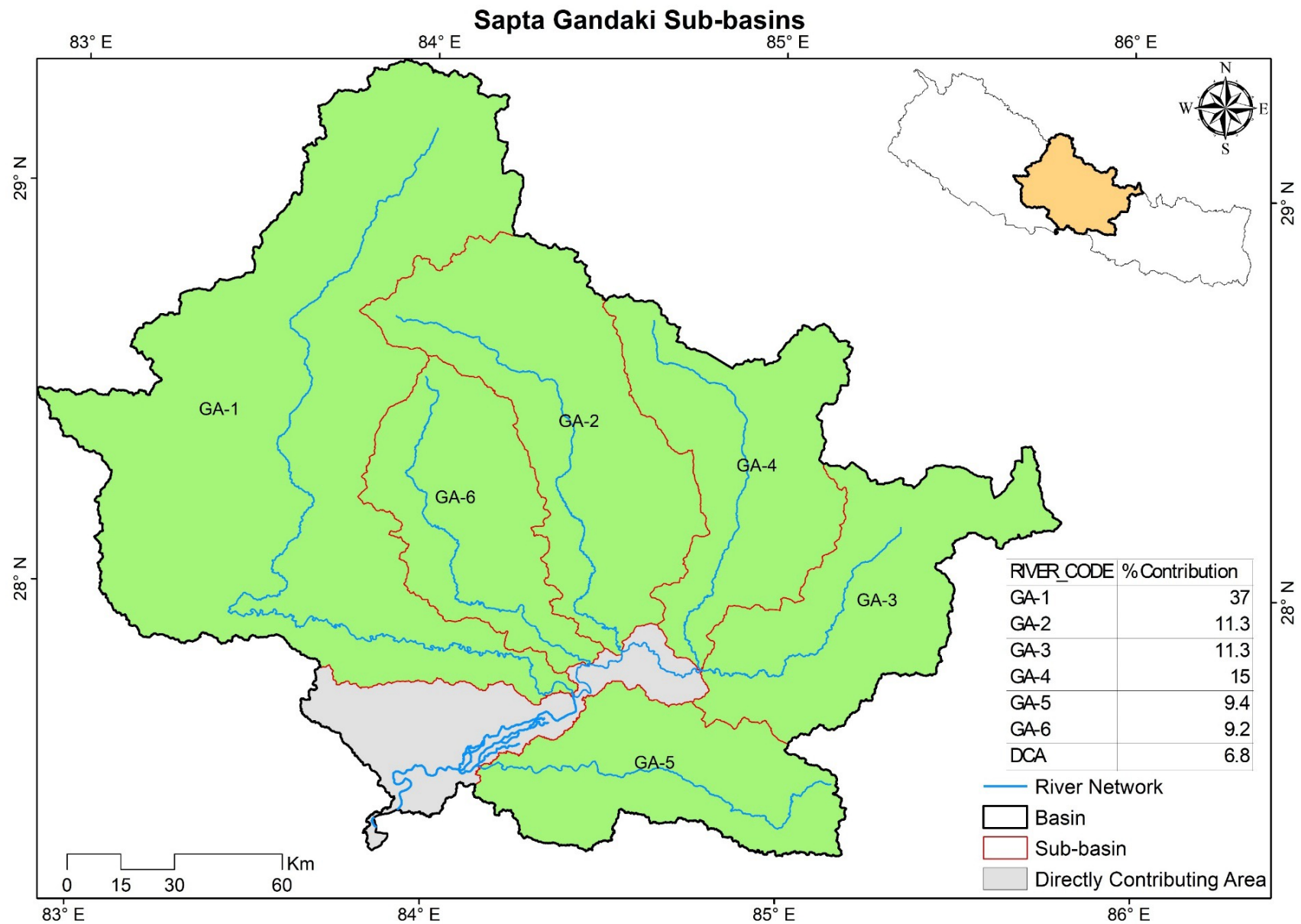


Figure 5-12: Sub-basins in the Gandaki Basin in Nepal

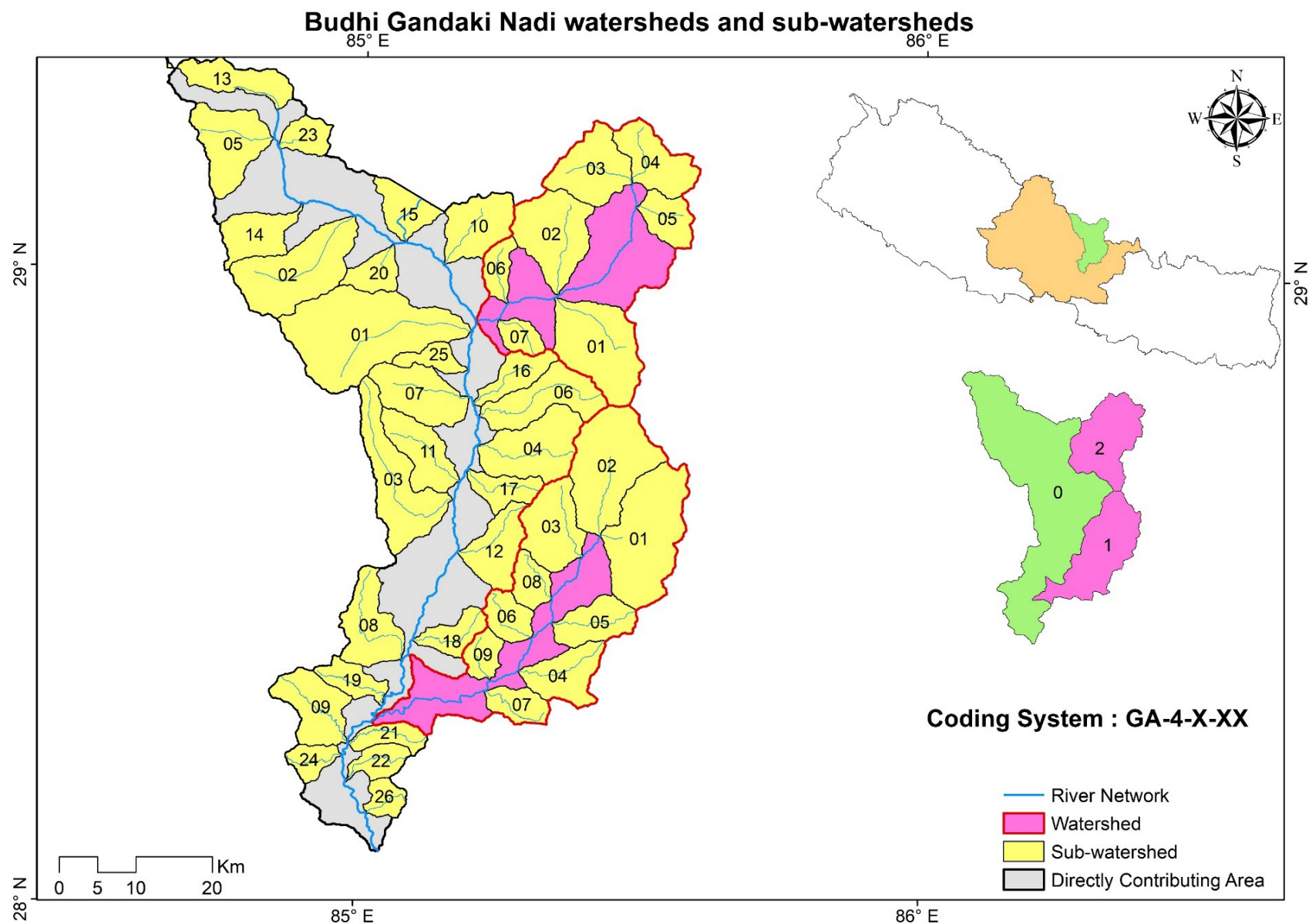


Figure 5-13: Watersheds and sub-watersheds in the Budhi Gandaki sub-basin of the Gandaki Basin, Nepal

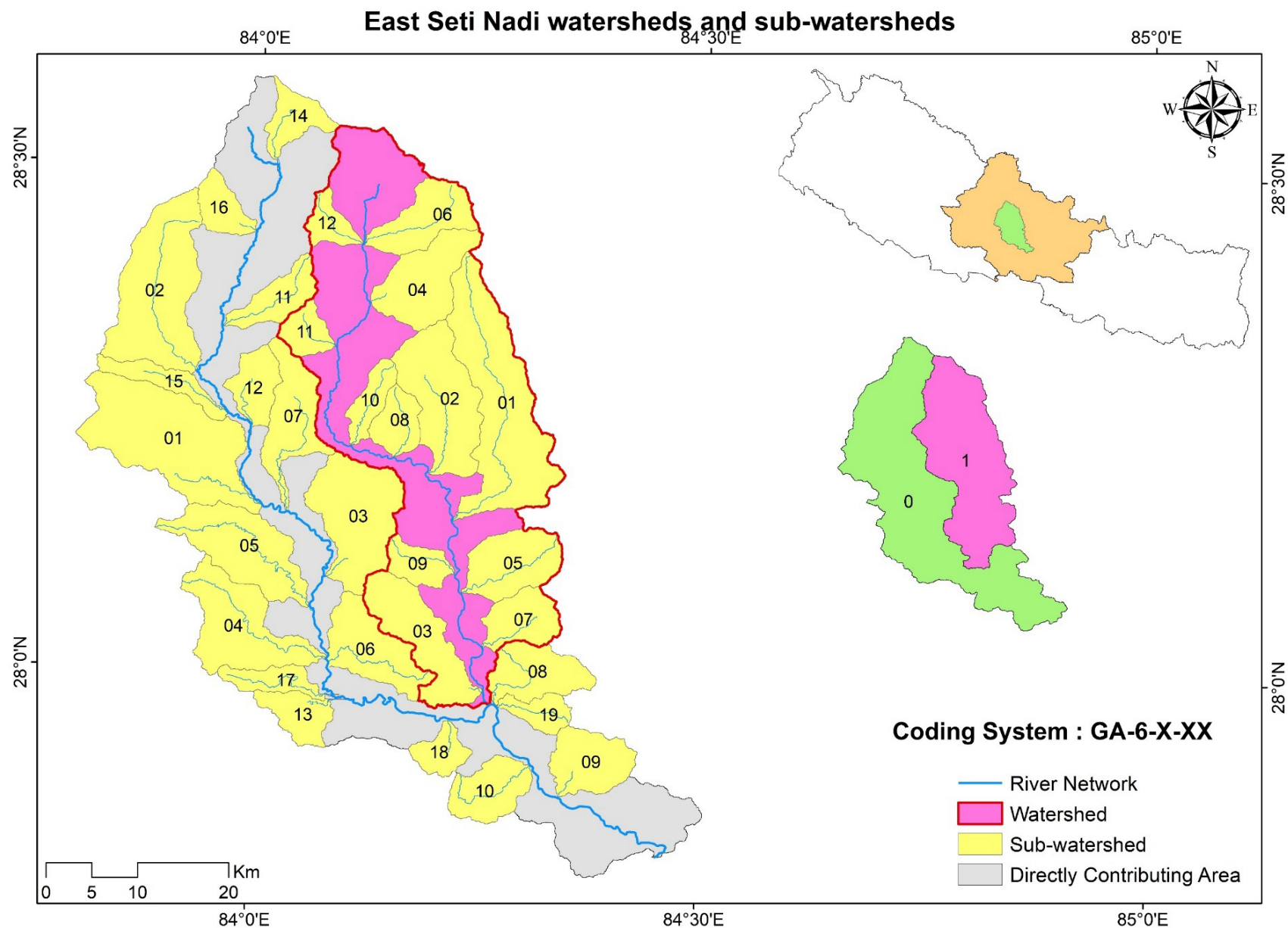


Figure 5-14: Watersheds and sub-watersheds in the East Seti sub-basin of the Gandaki Basin, Nepal

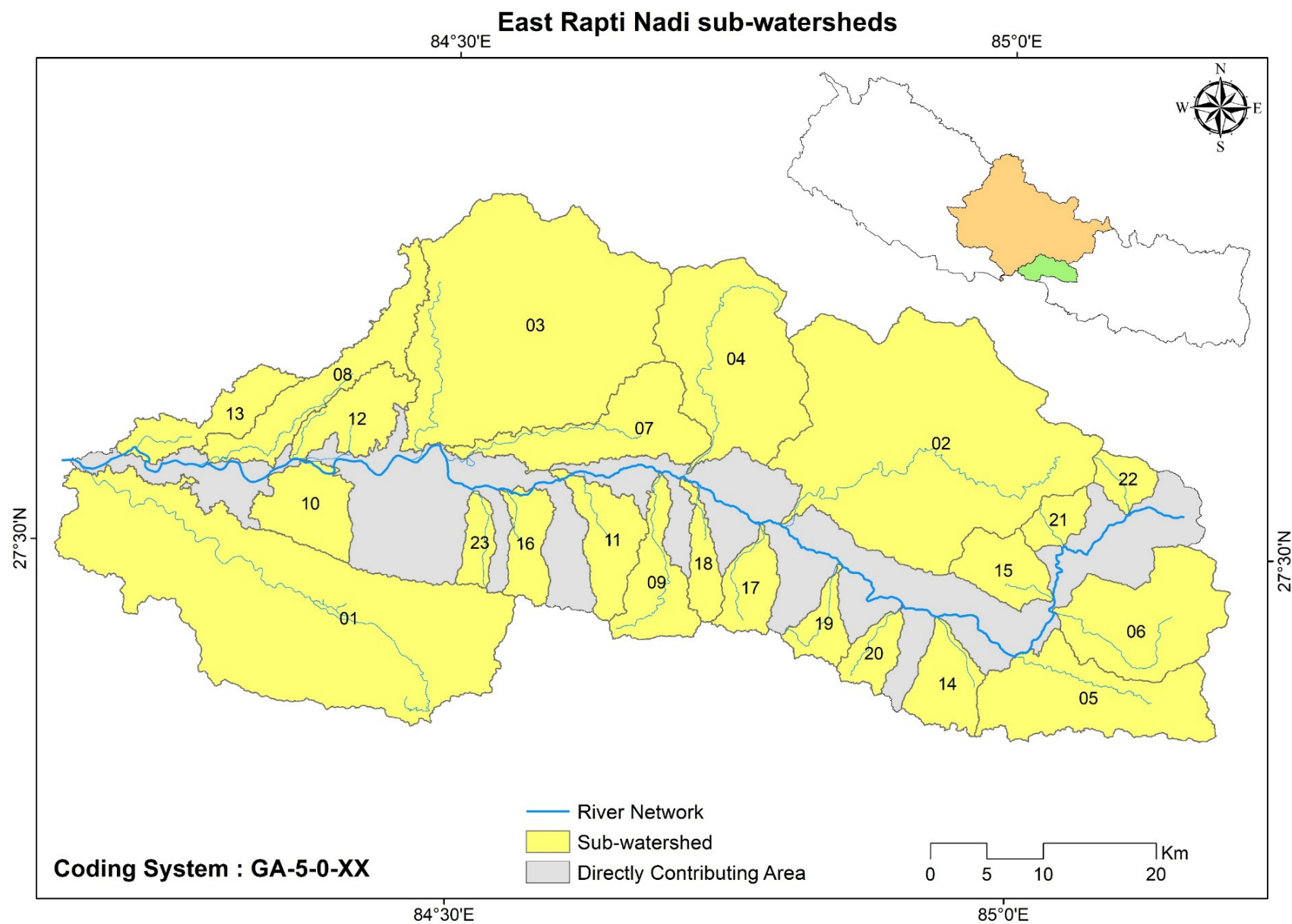


Figure 5-15: Watersheds and sub-watersheds in the East Rapti sub-basin of the Gandaki Basin, Nepal

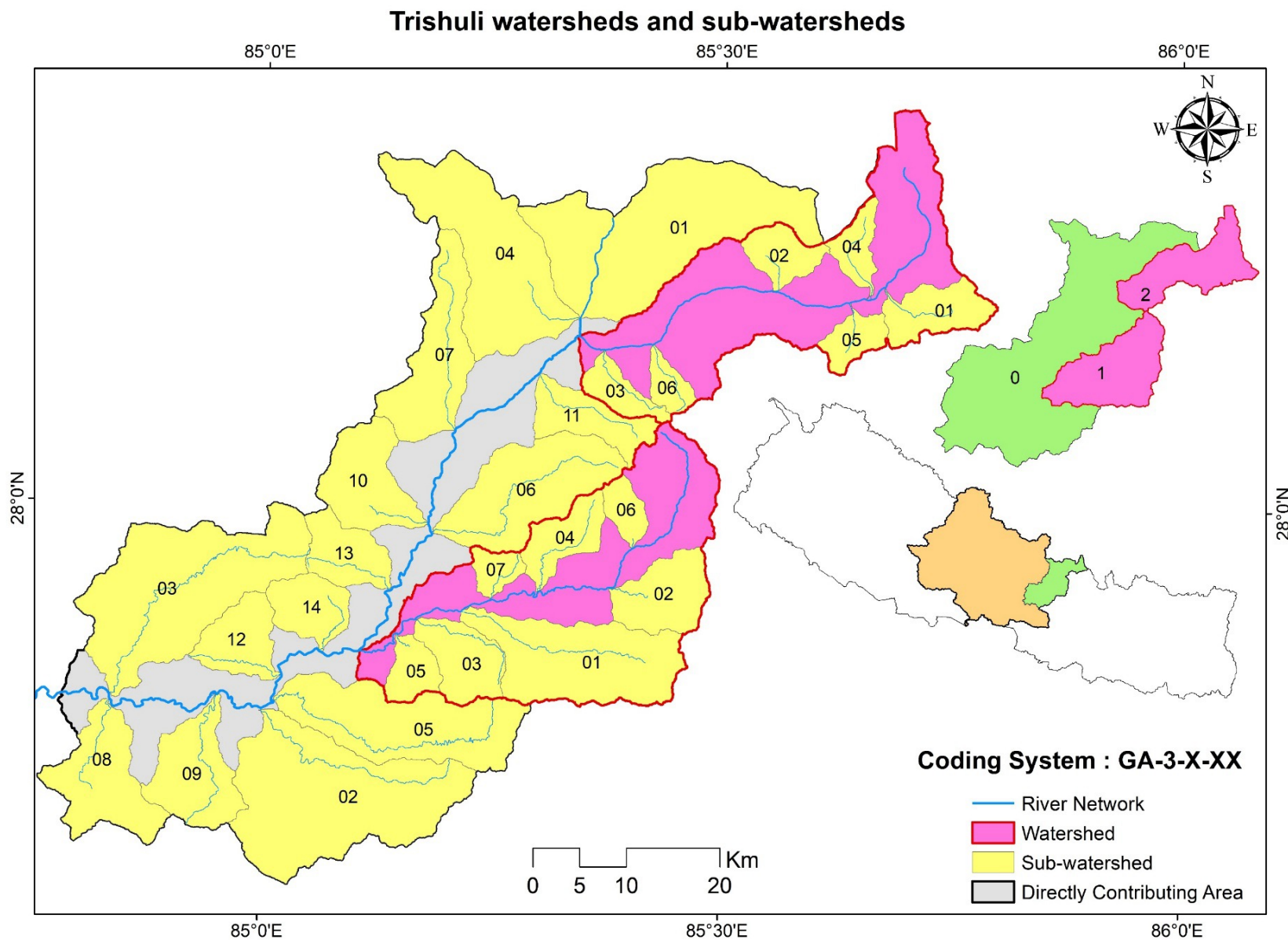


Figure 5-16: Watersheds and sub-watersheds in the Trishuli sub-basin of the Gandaki Basin, Nepal

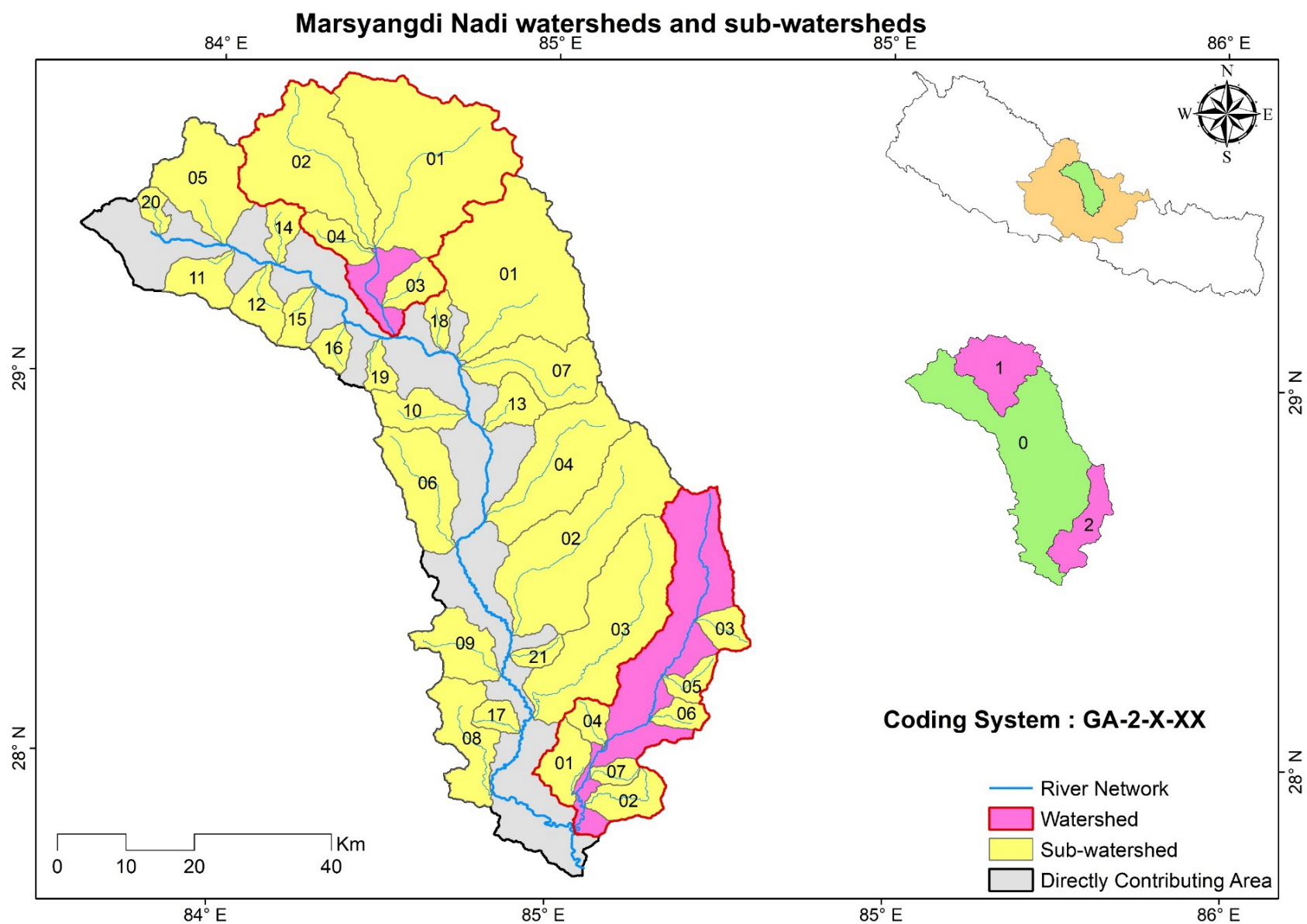


Figure 5-17: Watersheds and sub-watersheds in the Marshyangdi sub-basin of the Gandaki Basin, Nepal

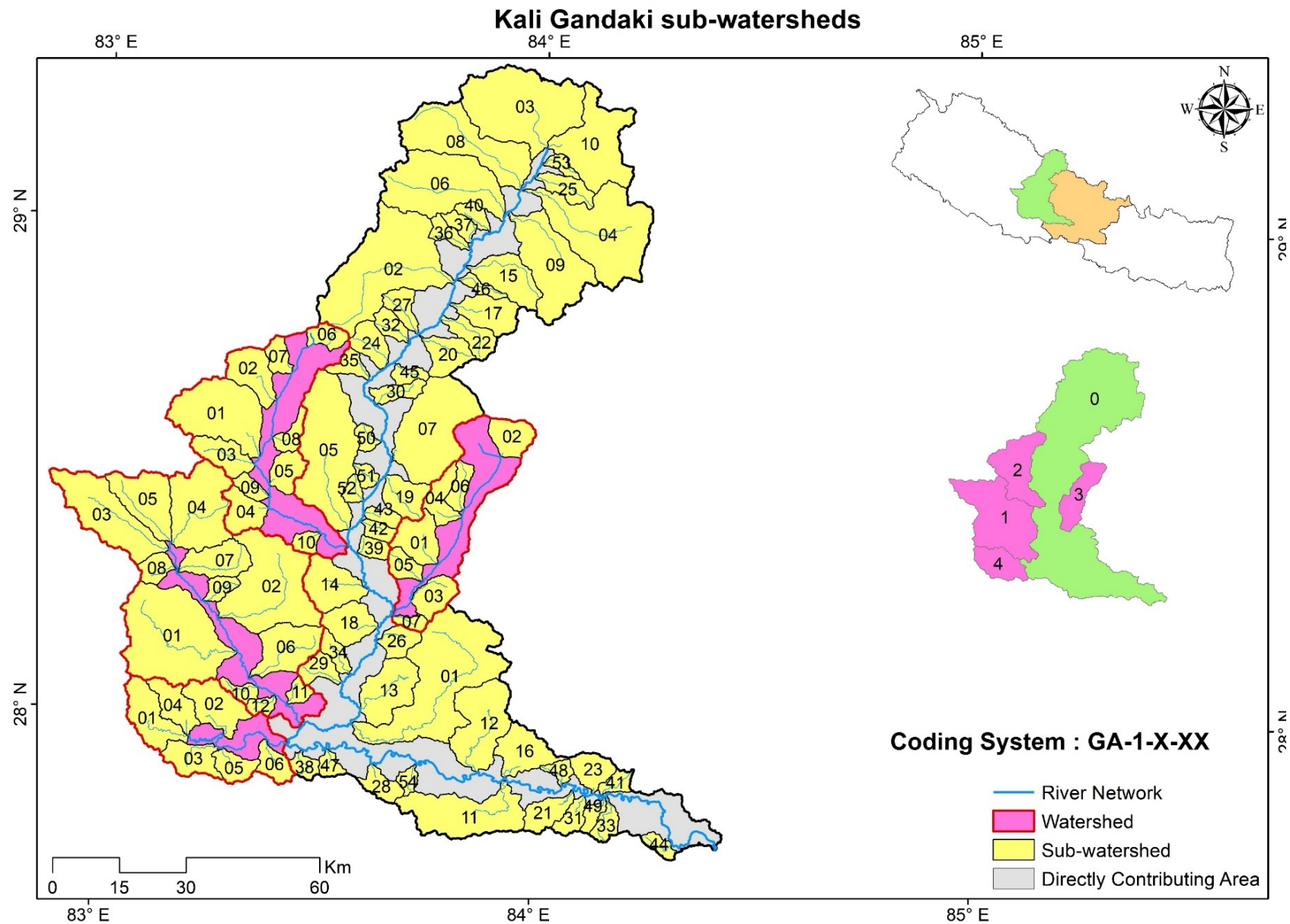


Figure 5-18: Watersheds and sub-watersheds in the Kali Gandaki sub-basin of the Gandaki Basin, Nepal

5.3 Koshi Basin

The Koshi Basin, located in the eastern part of Nepal, spans across districts such as Solukhumbu, Okhaldhunga, Sankhuwasabha, Bhojpur, Khotang, Udayapur and Sunsari. Total drainage area of Koshi Basin is 55,650 km², of which, 27,440 km² lies within Nepal. The basin is primarily drained by the Saptakoshi River, also known as the Koshi River, which originates from the eastern Himalayas. It shares a border with the Mahabharat Range in the south and extends towards the southern border with India. The Koshi River drains the water from the basin to the Ganges after passing through Nepal-India border. The Saptakoshi River is fed by seven major tributaries, namely, Arun, Tamor, Dudhkoshi, Likhu, Sunkoshi, Indrawati, and Tamakoshi.

The Koshi Basin has 43 rivers of Level-2 with area ranging from 21 to 29,980 km², 166 rivers of Level-3 with area ranging from 20 to 887 km² and 52 rivers of Level-4 with area range of 20 - 265 km². The Koshi Basin has 8 sub-basins with area range of 736 - 29,890 km², 12 watersheds with area range of 327-887 km² and 241 sub-watersheds with area range 20 - 470 km².

The rivers of different levels (Level-2 to Level-4) in the Koshi Basin is tabulated in Annex 6 and the details of sub-basins, watersheds and sub-watersheds within the Koshi Basin in Annex 7. Figure 5-19 to Figure 5-26 depict mapping of HUs in the Koshi Basin.

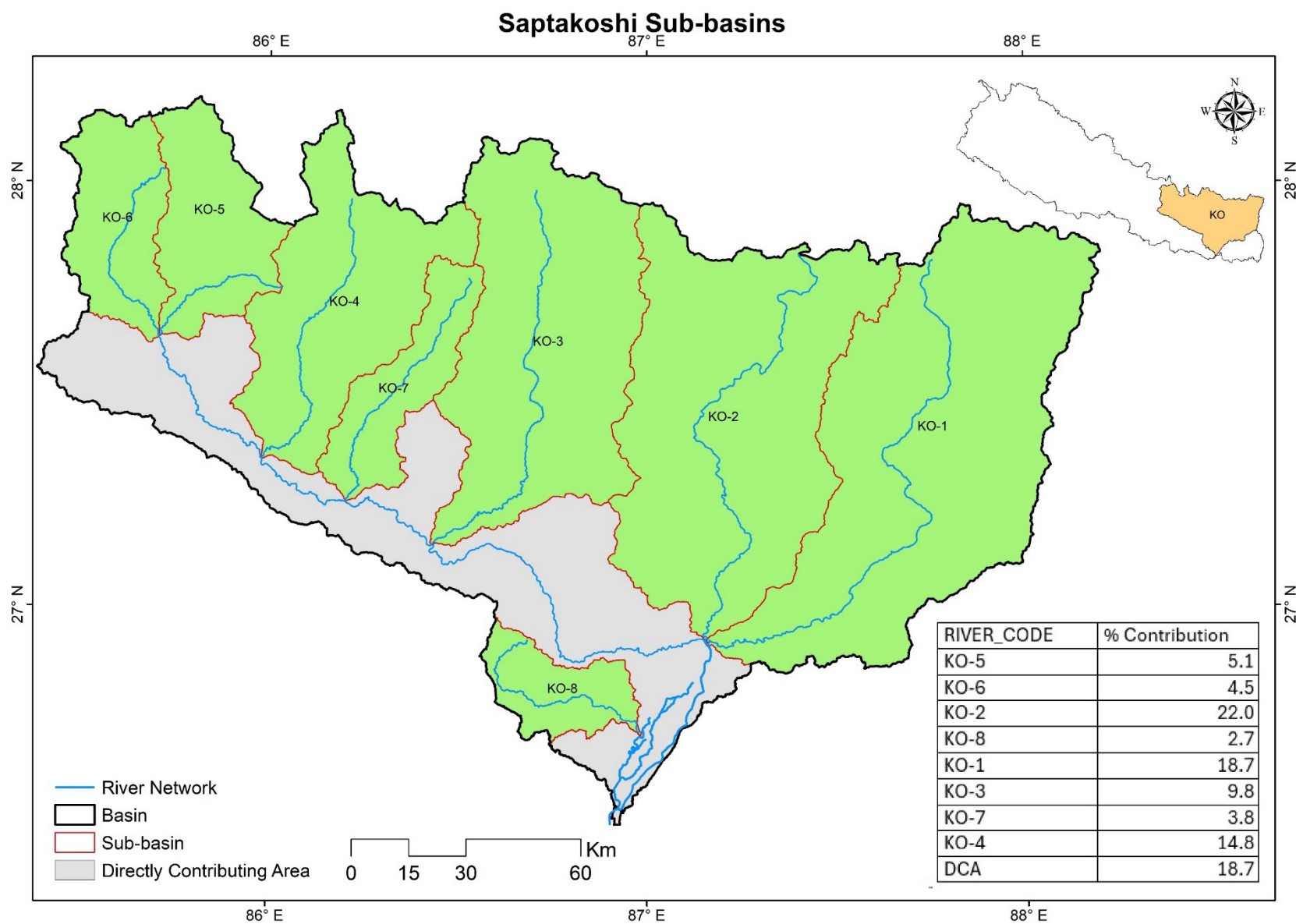


Figure 5-19: Sub-basins in the Koshi Basin in Nepal

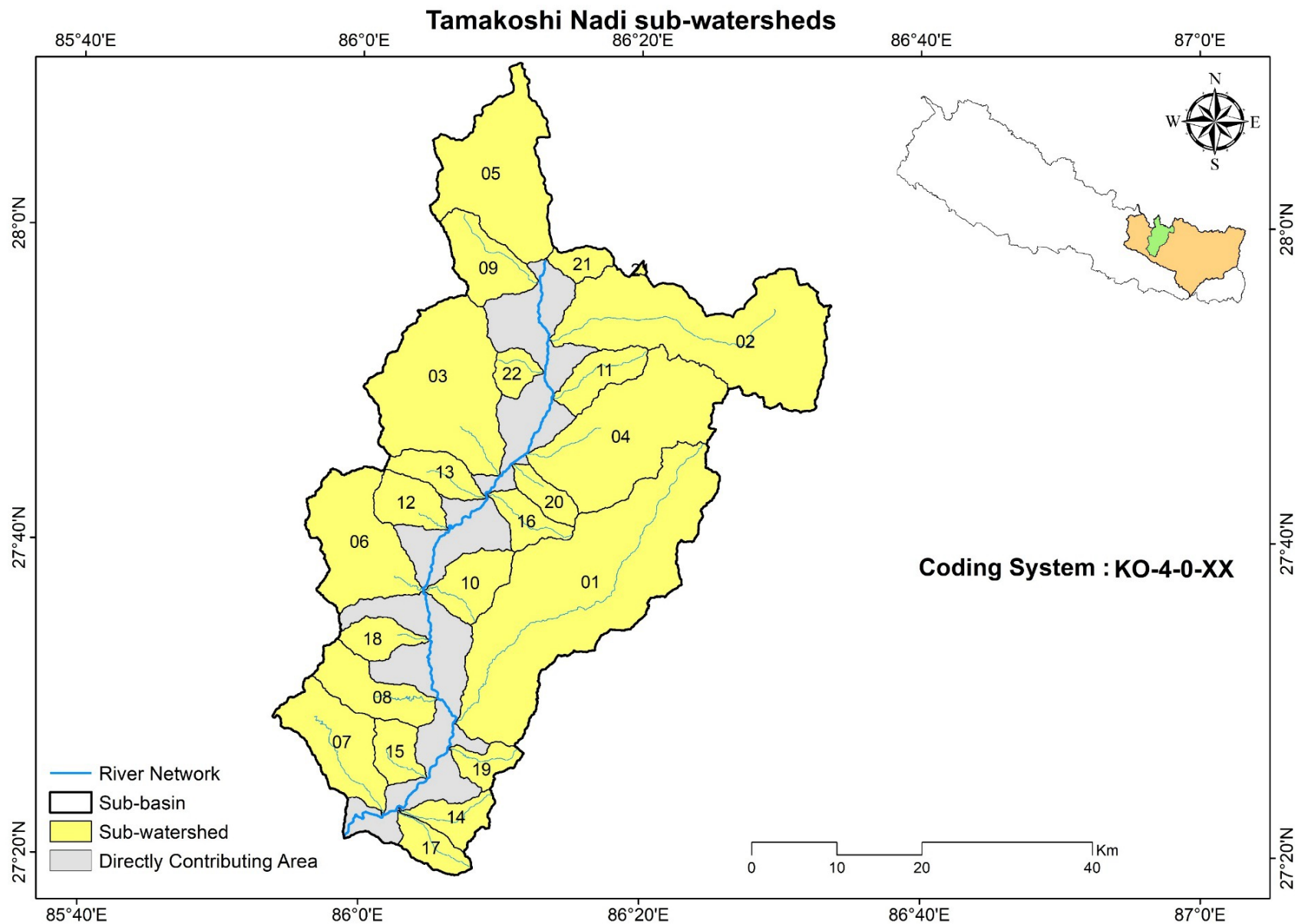


Figure 5-20: Sub-watersheds in the Tamakoshi sub-basin of the Koshi Basin, Nepal

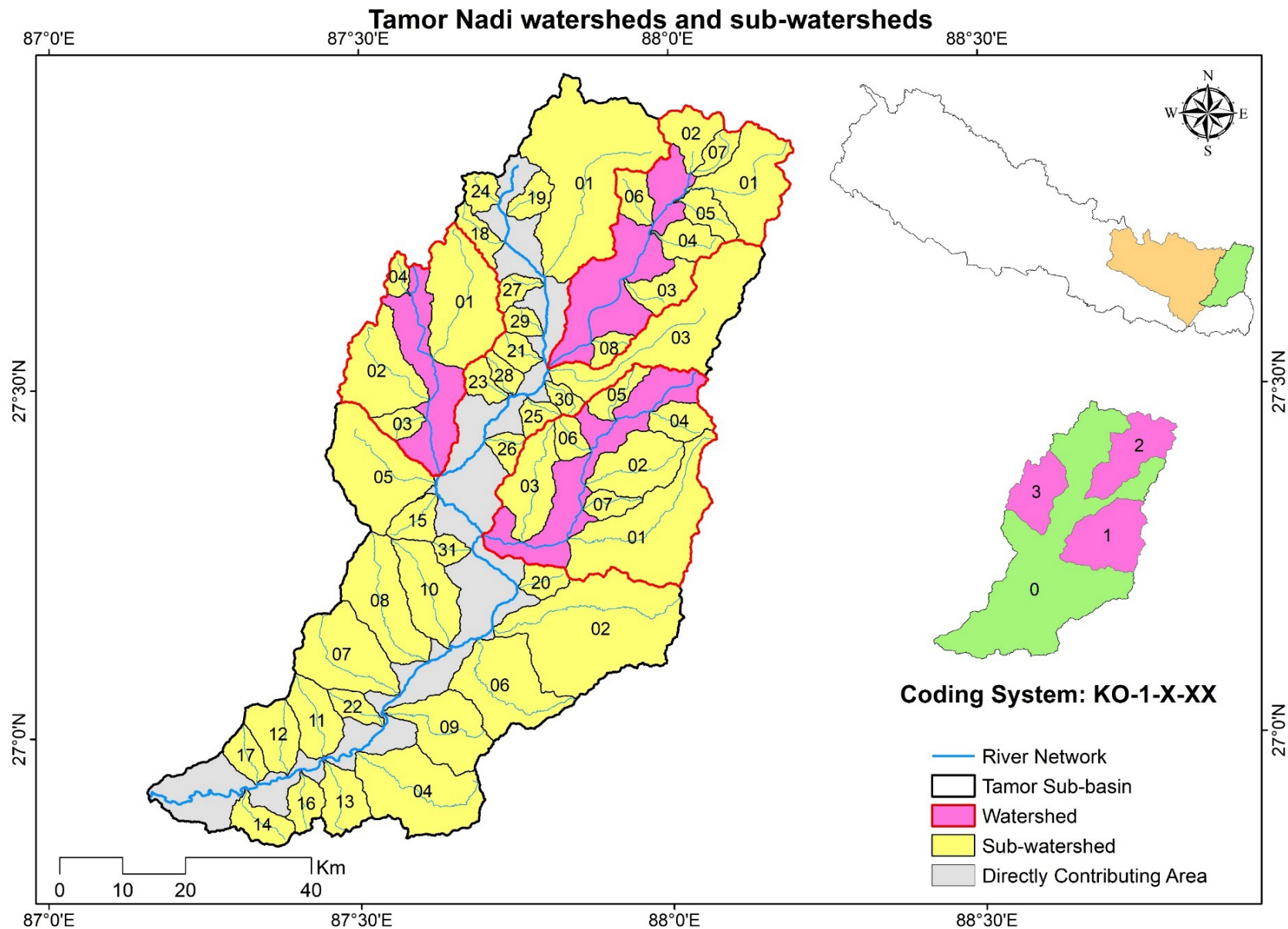


Figure 5-21: Watersheds and sub-watersheds in the Tamor sub-basin of the Koshi Basin, Nepal

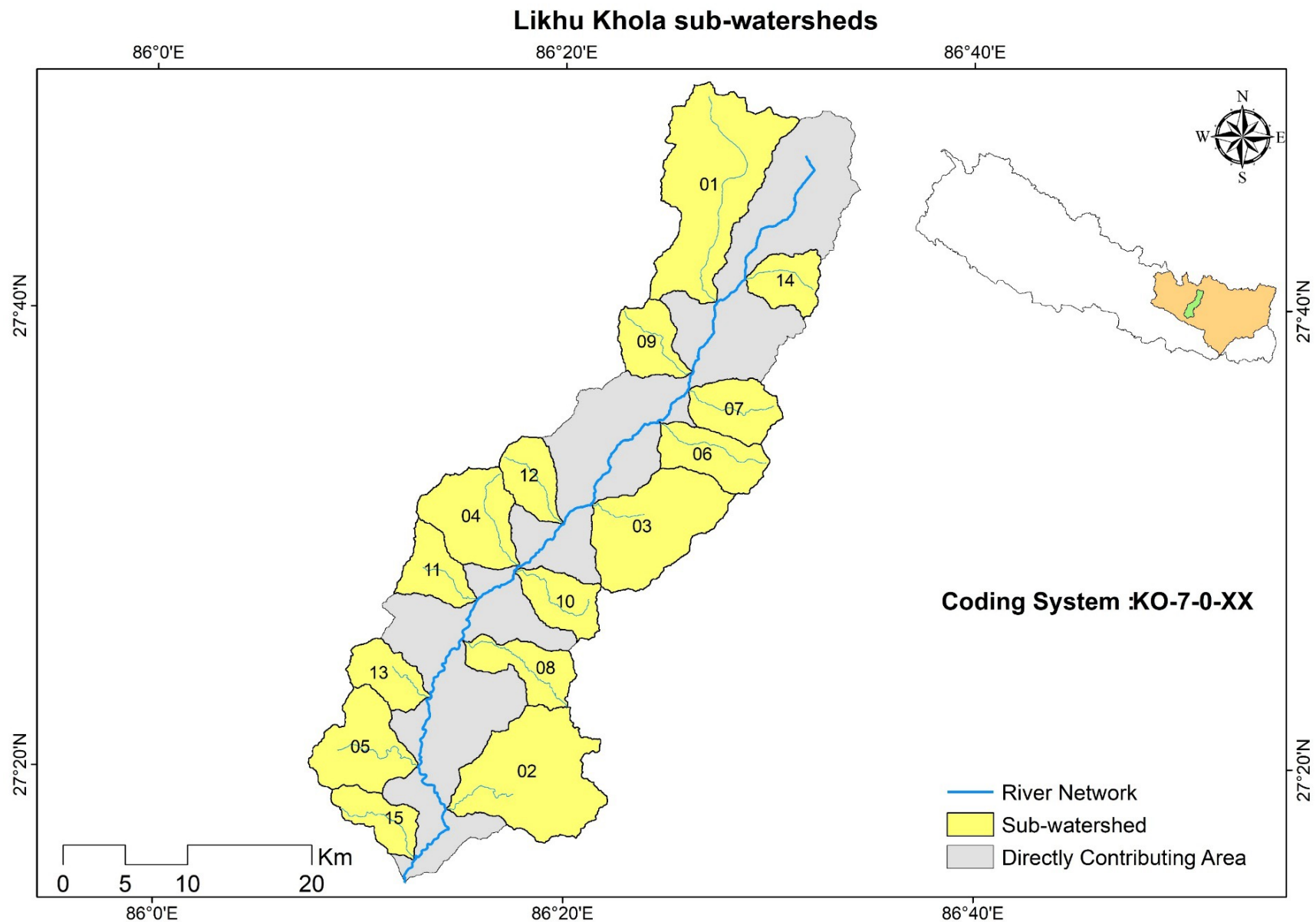


Figure 5-22: Sub-watersheds in the Likhu, Koshi Basin, Nepal

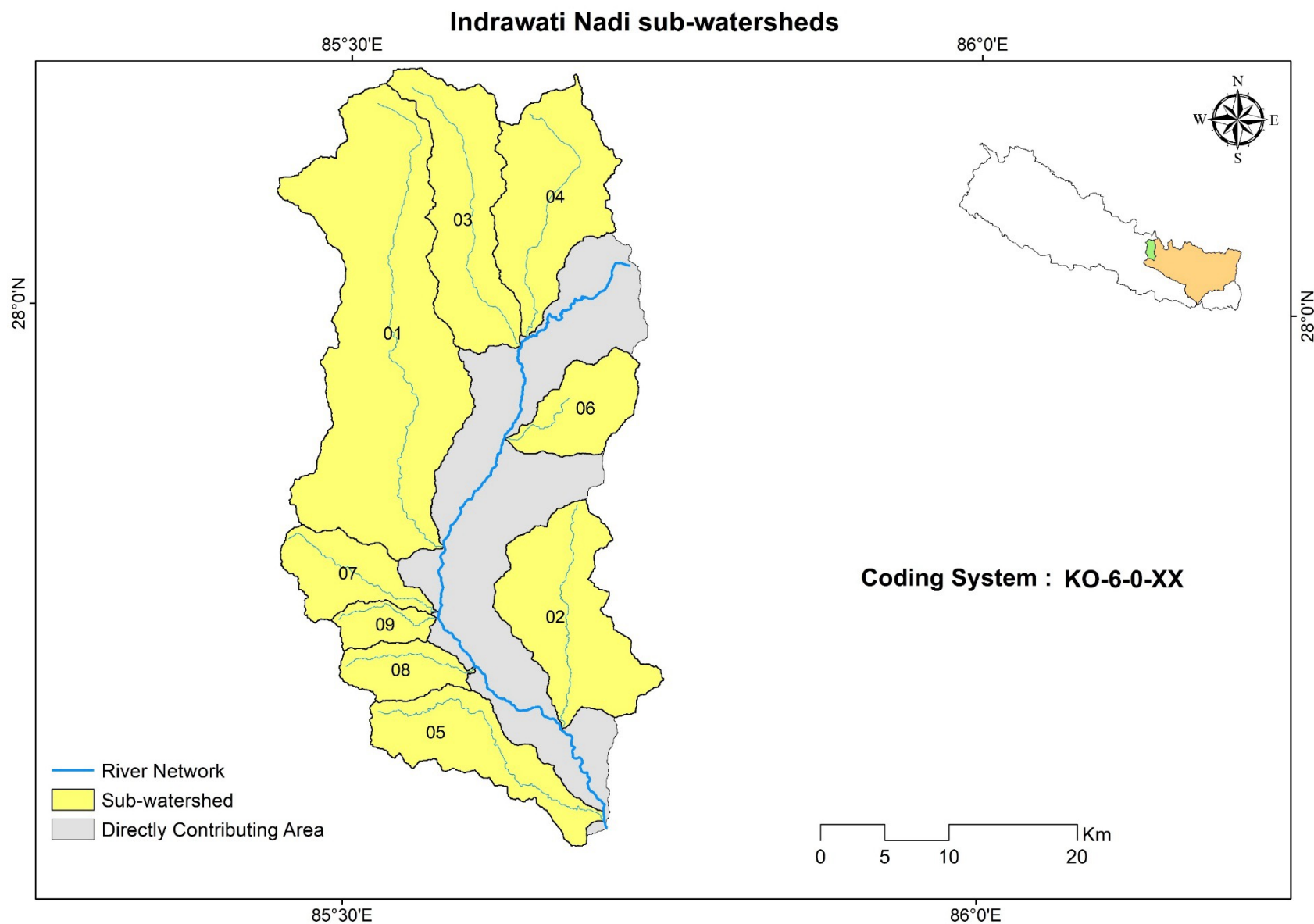


Figure 5-23: Sub-watersheds in the Indrawati sub-basin, Koshi Basin, Nepal

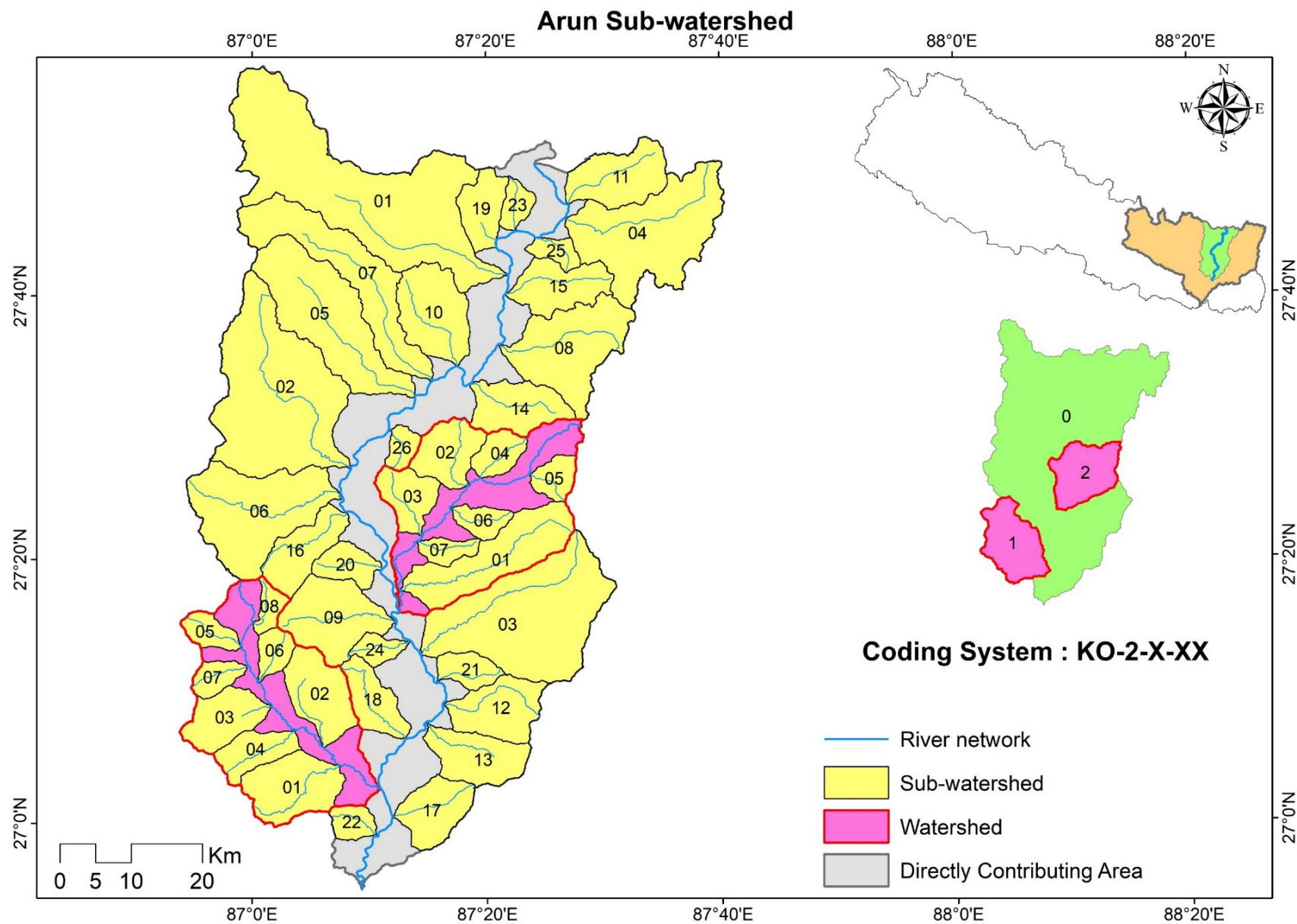


Figure 5-24: Watersheds and sub-watersheds in the Arun sub-basin of the Koshi Basin, Nepal

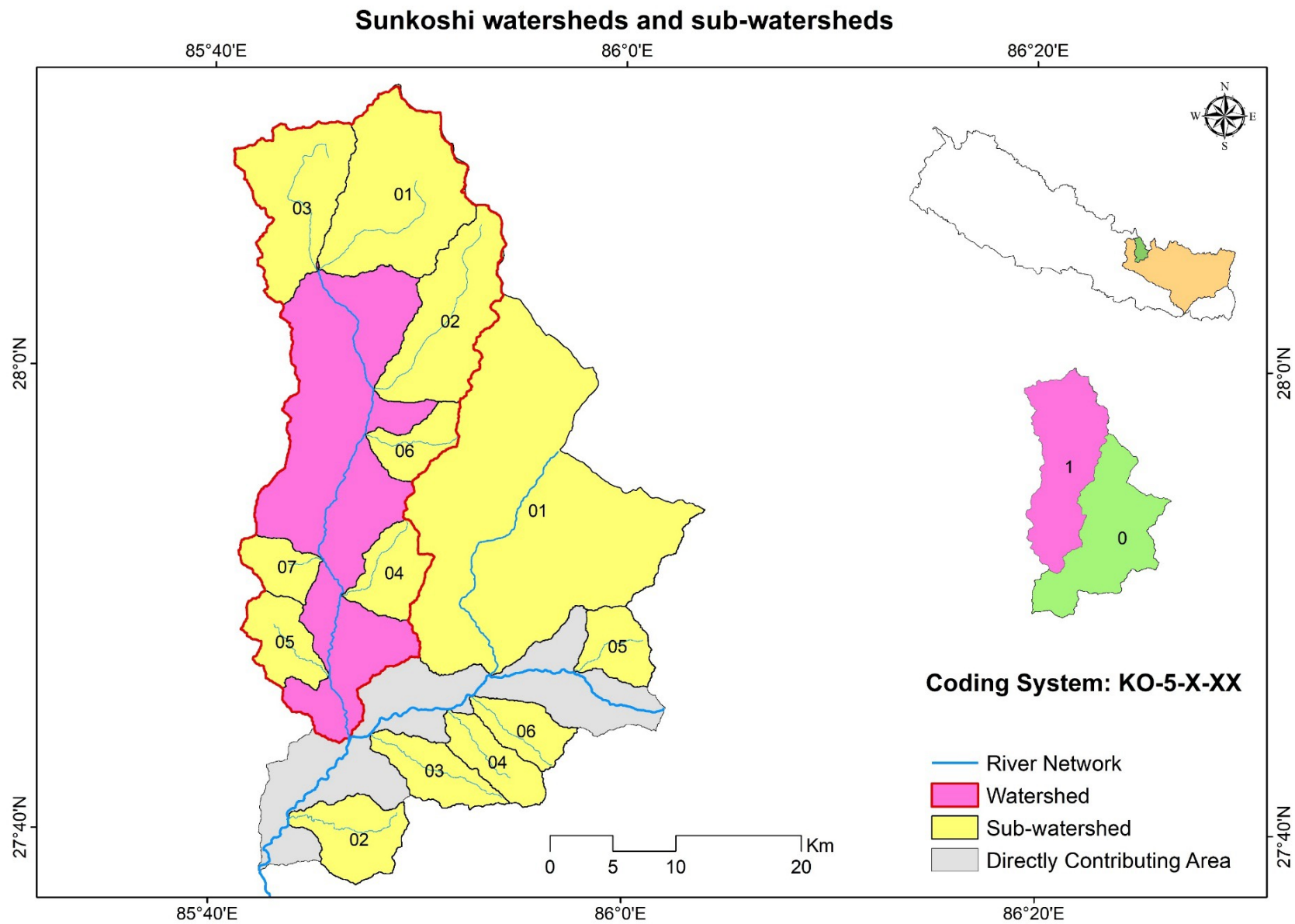


Figure 5-25: Watersheds and sub-watersheds in the Sun-Koshi sub-basin of the Koshi Basin, Nepal

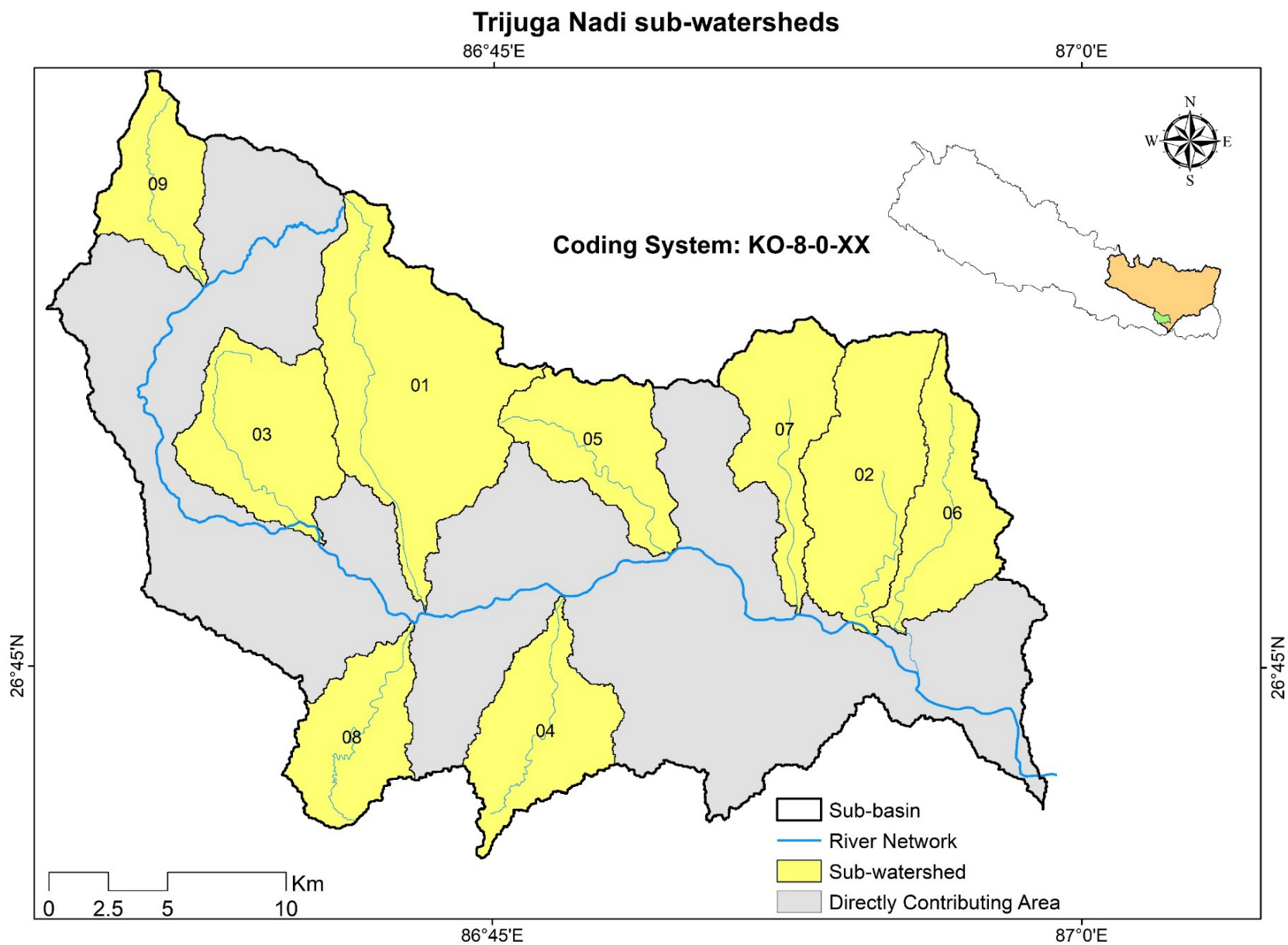


Figure 5-26: Sub-watersheds in the Trijuga sub-basin, Koshi Basin, Nepal

5.4 Mahakali Basin

The Mahakali Basin, located in the far western region of Nepal, spans across districts such as Darchula, Baitadi, Dadeldhura, and Kanchanpur. This basin is primarily drained by the Mahakali River, which serves as a significant waterway in the region and forms part of the border between Nepal and India. The Mahakali Basin drains a total area of 15,942 km², of which, 5,254 km² fall within Nepal. The Mahakali River originates from the high-altitude glaciers of the Indian Himalayas. The river flows southward through steep and rugged mountainous terrain before entering the plains of the Terai. The basin shares its borders with the Himalayan range to the north and extends towards the fertile southern plains. The Mahakali River is nourished by several tributaries, major contributors from Nepal side are Chameliya and Surnayagad rivers, which originate from various parts of the High Himalayas.

The Mahakali Basin has 26 rivers of Level-2 with area ranging from 21 to 1,590 km² and 35 rivers of Level-3 with area ranging from 20 to 324 km². The Mahakali Basin has 2 sub-basins with area 835 and 1590 km², respectively, 2 watersheds with areas 344 and 478 km², and 57 sub-watersheds with area range 20 - 324 km². The rivers of different levels (Level-2 to Level-4) in the Mahakali Basin is tabulated in Annex 8 and the details of sub-basins, watersheds and sub-watersheds within the Mahakali Basin in Annex 9. Figure 5-27 to Figure 5-29 depict mapping of HUs in the Mahakali Basin.

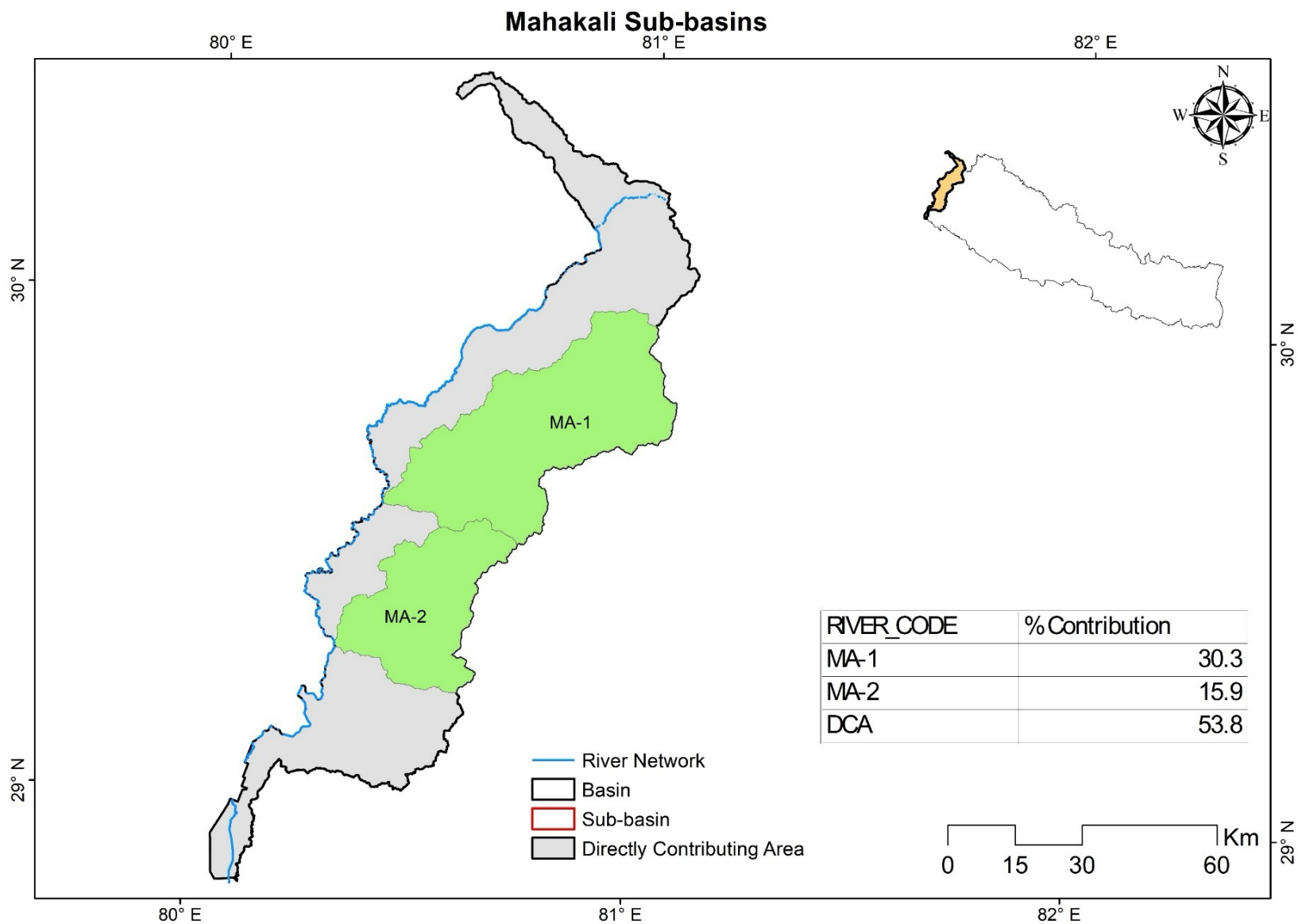


Figure 5-27: Sub-basins in the Mahakali Basin in Nepal

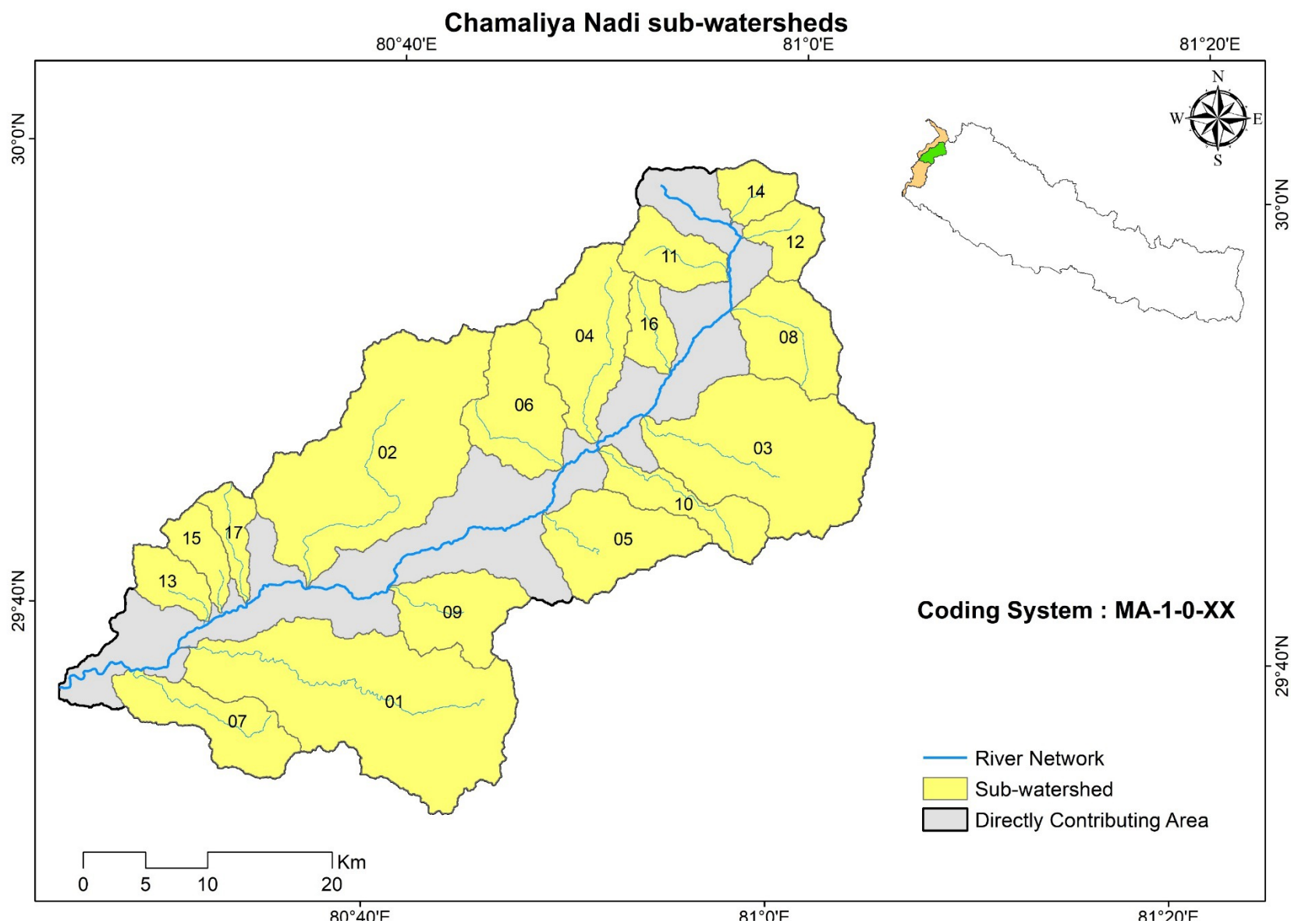


Figure 5-28: Sub-watersheds in the Chamelia sub-basin (MK-1), Mahakali Basin, Nepal

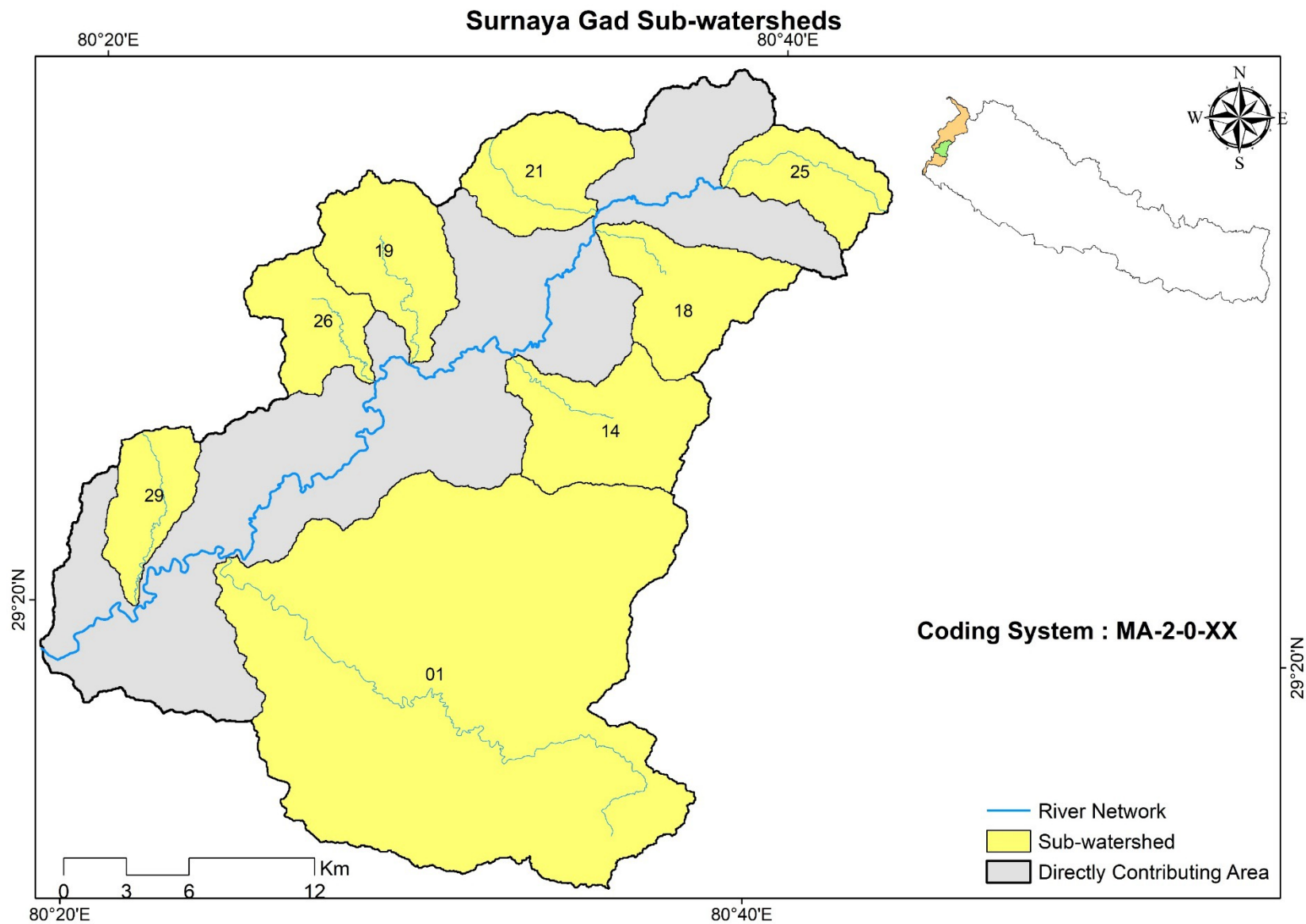


Figure 5-29: Sub-watersheds in the Surnaya Gad sub-basin (MK-2), Mahakali Basin, Nepal

5.5 West Rapti (Independent) Basin

West Rapti (independent) Basin, located in the mid-western region of Nepal, encompasses districts such as Rolpa, West Rukum, Dang, Pyuthan, and Banke. This basin is primarily drained out by the West Rapti River which has drainage area of 6,454 km² lying entirely within Nepal. The West Rapti River originates in the high hills of Rolpa district, flowing southward through a diverse landscape of hills, valleys, and plains before joining the larger Rapti River. The basin shares its borders with the Mahabharat Range to the north and extends towards the southern Terai plains. The West Rapti River is fed by two major tributaries, namely, Madi Khola and Jhimruk Khola, which originate from the mid-hills of the region.

The West Rapti (Independent) Basin has 30 rivers of Level-2 with area ranging from 21 to 2,347 km² and 22 rivers of Level-3 with area ranging from 20 to 636 km², and 6 rivers of Level-4 with area range of 32 - 136 km². West Rapti (independent) Basin has 2 sub-basins with areas 1038 and 2348 km², 1 watershed with area 636 km² and 55 sub-watersheds with area range of 20 - 257 km².

The rivers of different levels (Level-2 to Level-4) in the West Rapti (independent) Basin is tabulated in Annex 10 and the details of sub-basins, watersheds and sub-watersheds within the West Rapti (independent) Basin in Annex 11. Figure 5-19 to Figure 5-32 depict mapping of HUs in the West Rapti (independent) Basin.

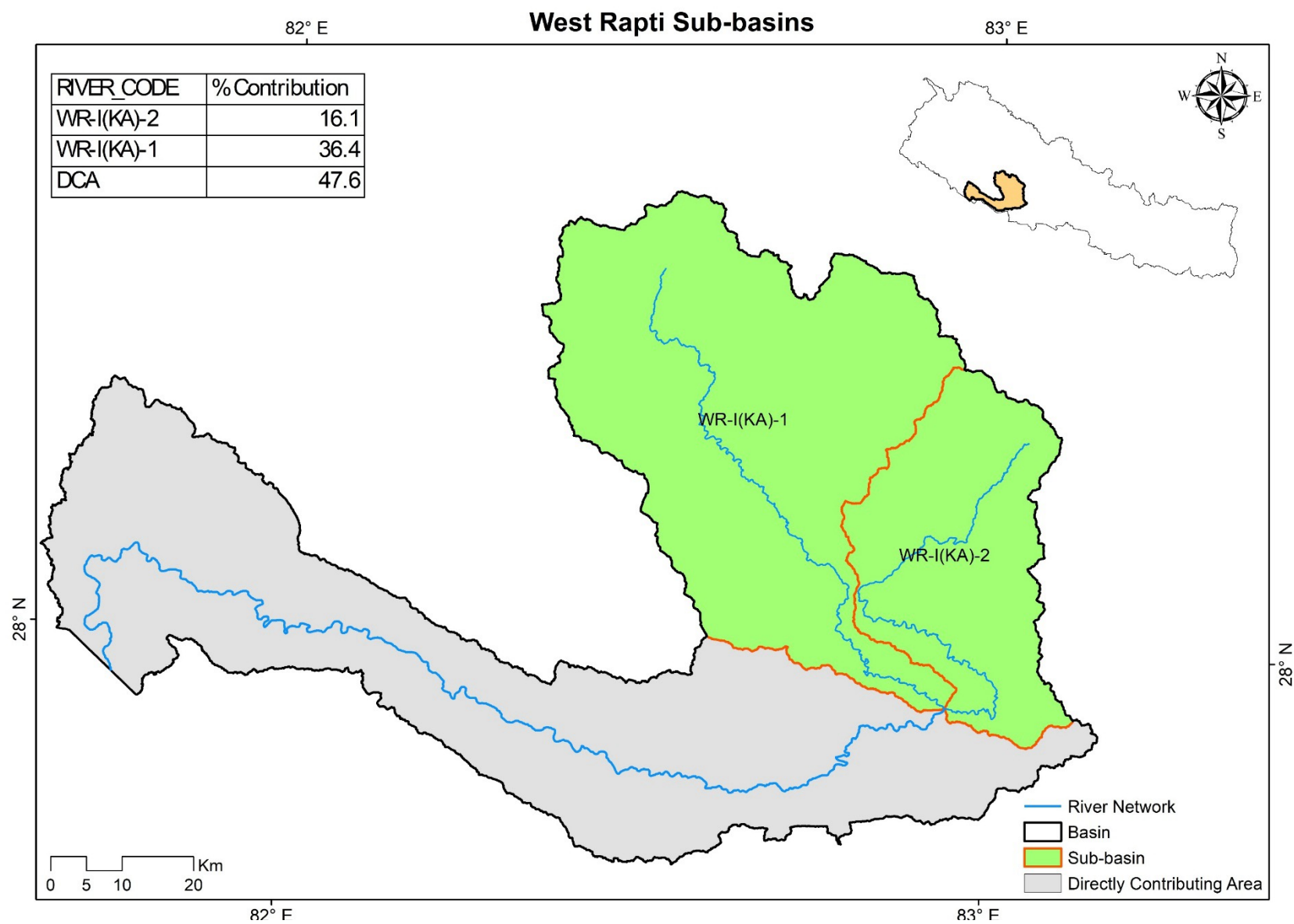


Figure 5-30: Sub-basins and watersheds in the West Rapti (independent) Basin, Nepal

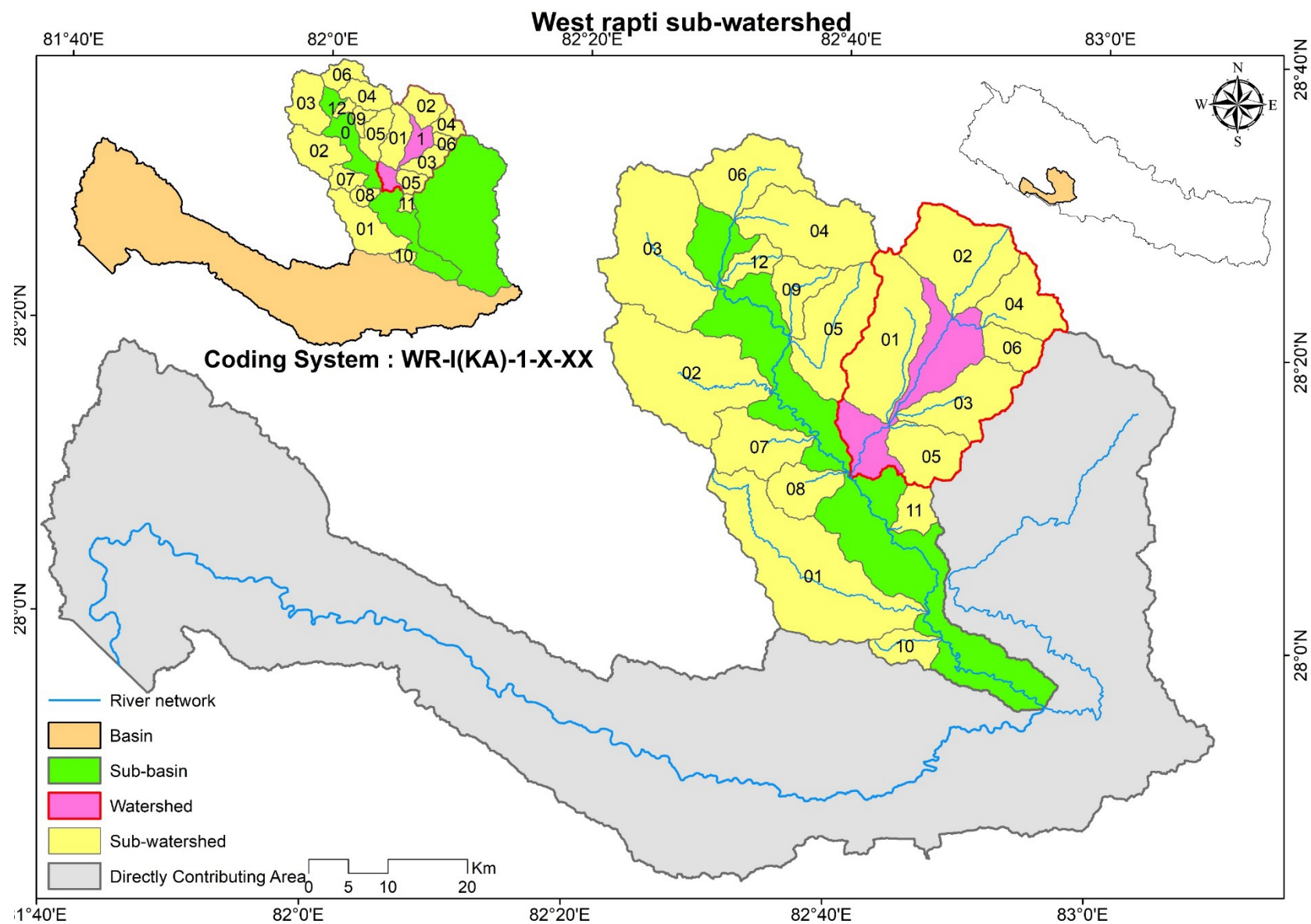


Figure 5-31: Sub-watersheds in one of the Sub-basin (WR-I(KA)-1) of the West Rapti (independent) Basin, Nepal

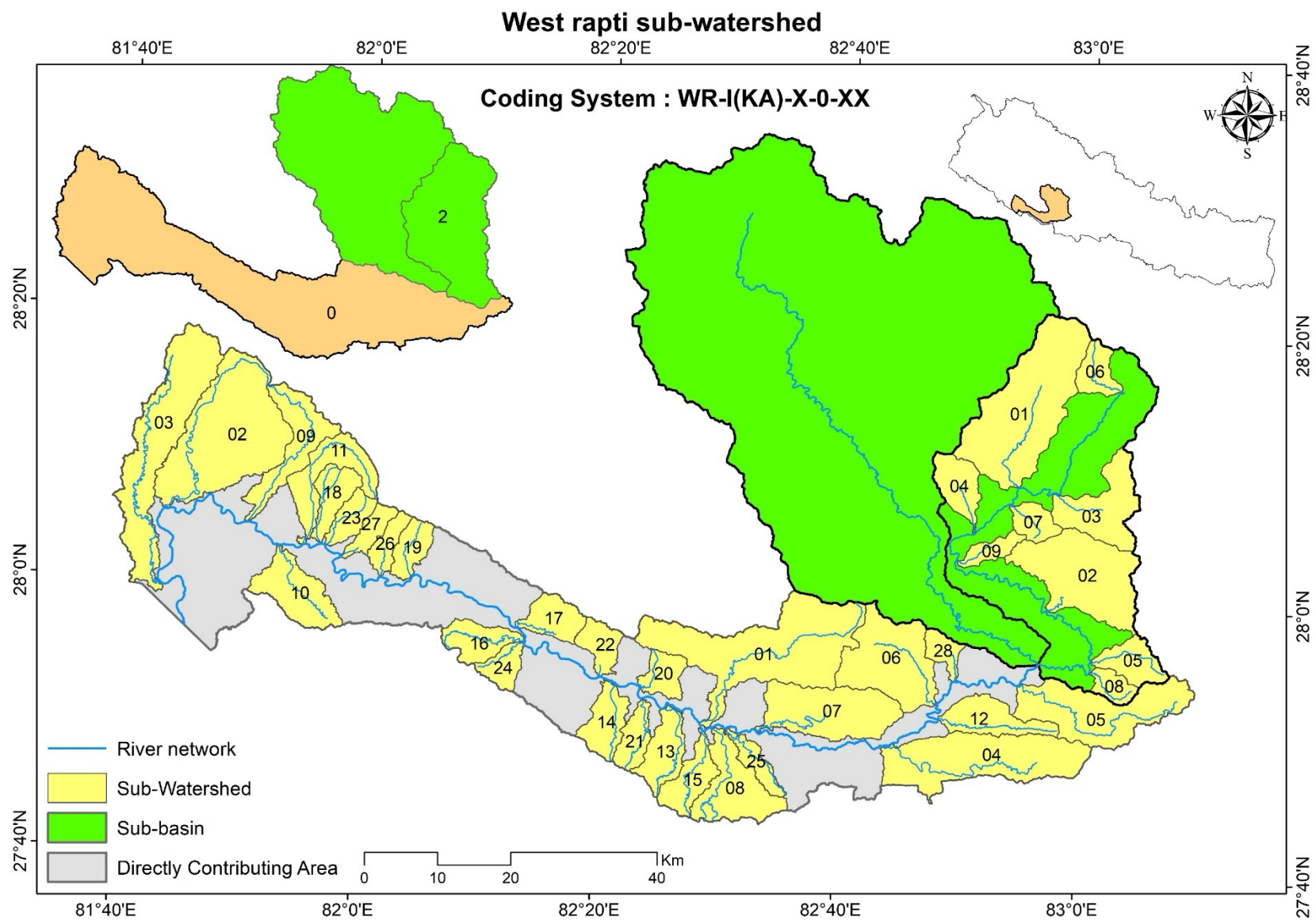


Figure 5-32: Sub-watersheds other than in the WR-I(KA)-1 sub-basin of the West Rapti (independent) Basin, Nepal

5.6 Bagmati (Independent) Basin

The Bagmati (Independent) Basin, situated in the central part of Nepal, encompasses key districts including Kathmandu, Lalitpur, Bhaktapur, Makwanpur, Rautahat, Sarlahi, and Sindhuli. This basin is primarily drained-out by the Bagmati River, which flows through the Kathmandu Valley, serving as a lifeline for the capital city and its surroundings. The Bagmati River originates from the Bagdwar spring in the Shivapuri Hills, north of Kathmandu and has a drainage area of 3,815 km² before entering into India. The river winds its way through the densely populated Kathmandu Valley, descending through the Mahabharat Range, and eventually flowing into the Terai plains before crossing the border into India. The Bagmati River is joined by several tributaries, including the Bishnumati, Manohara, Hanumante, and Dhobikhola rivers within the Kathmandu Valley, and the Kokhajor, Marin, and Lakhandei rivers as it flows further south.

The Bagmati (Independent) Basin has 22 rivers of Level-2 with area ranging from 26 to 3,815 km², 7 rivers of Level-3 with area ranging from 29 to 153 km² and 3 rivers of Level-4 with area range of 29 - 71 km². The Bagmati (Independent) Basin has no sub-basins, 3 watersheds with area range of 330-538 km² and 29 sub-watersheds with area range of 26 - 264 km².

The rivers of different levels (Level-2 to Level-4) in the Bagmati (Independent) Basin is tabulated in Annex 12 and the details of sub-basins, watersheds and sub-watersheds within the Bagmati (Independent) Basin in Annex 13. Figure 5-33 to Figure 5-34 depict mapping of HUs in the Bagmati (Independent) Basin.

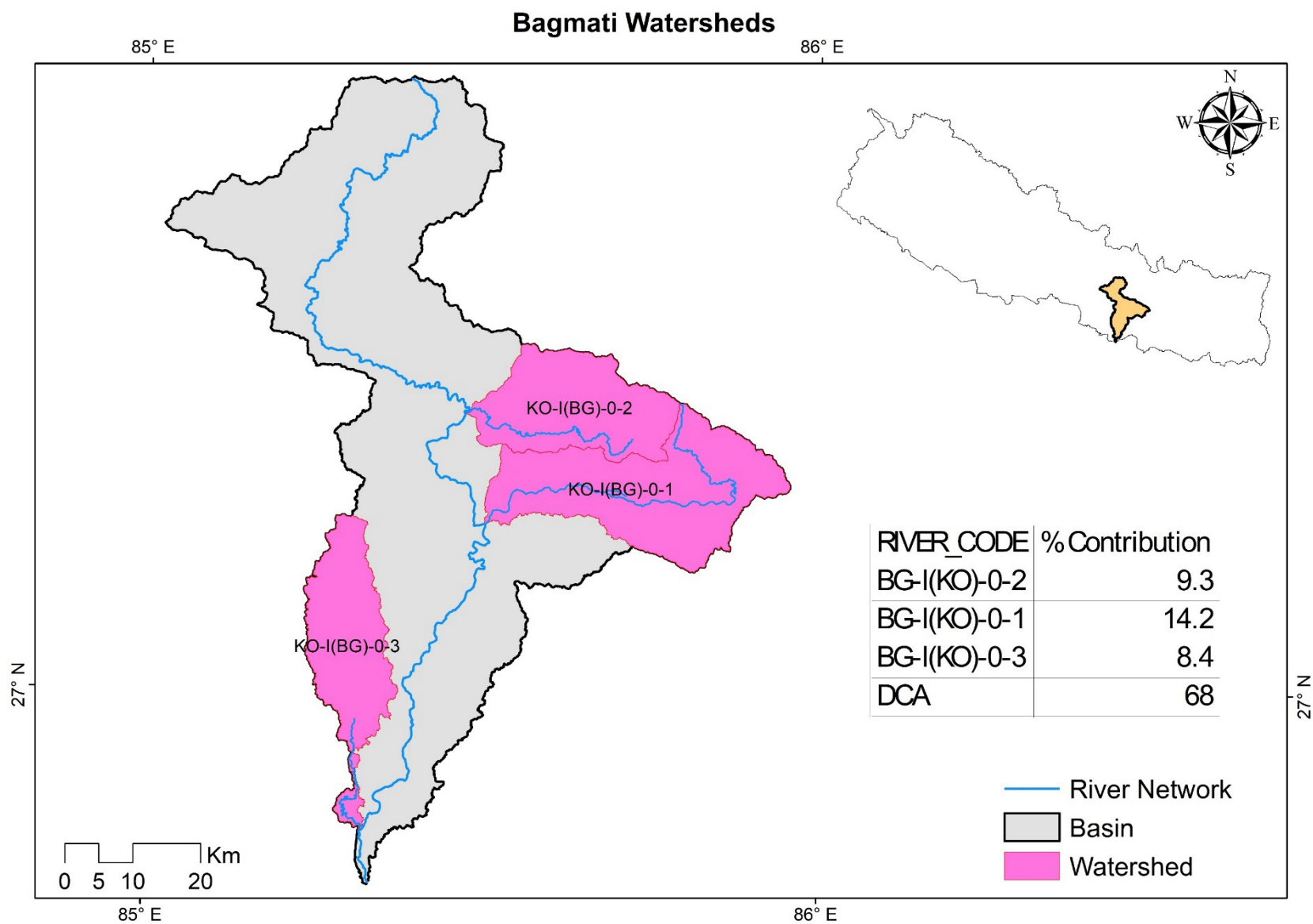


Figure 5-33: Watersheds in the Bagmati (independent) Basin, Nepal

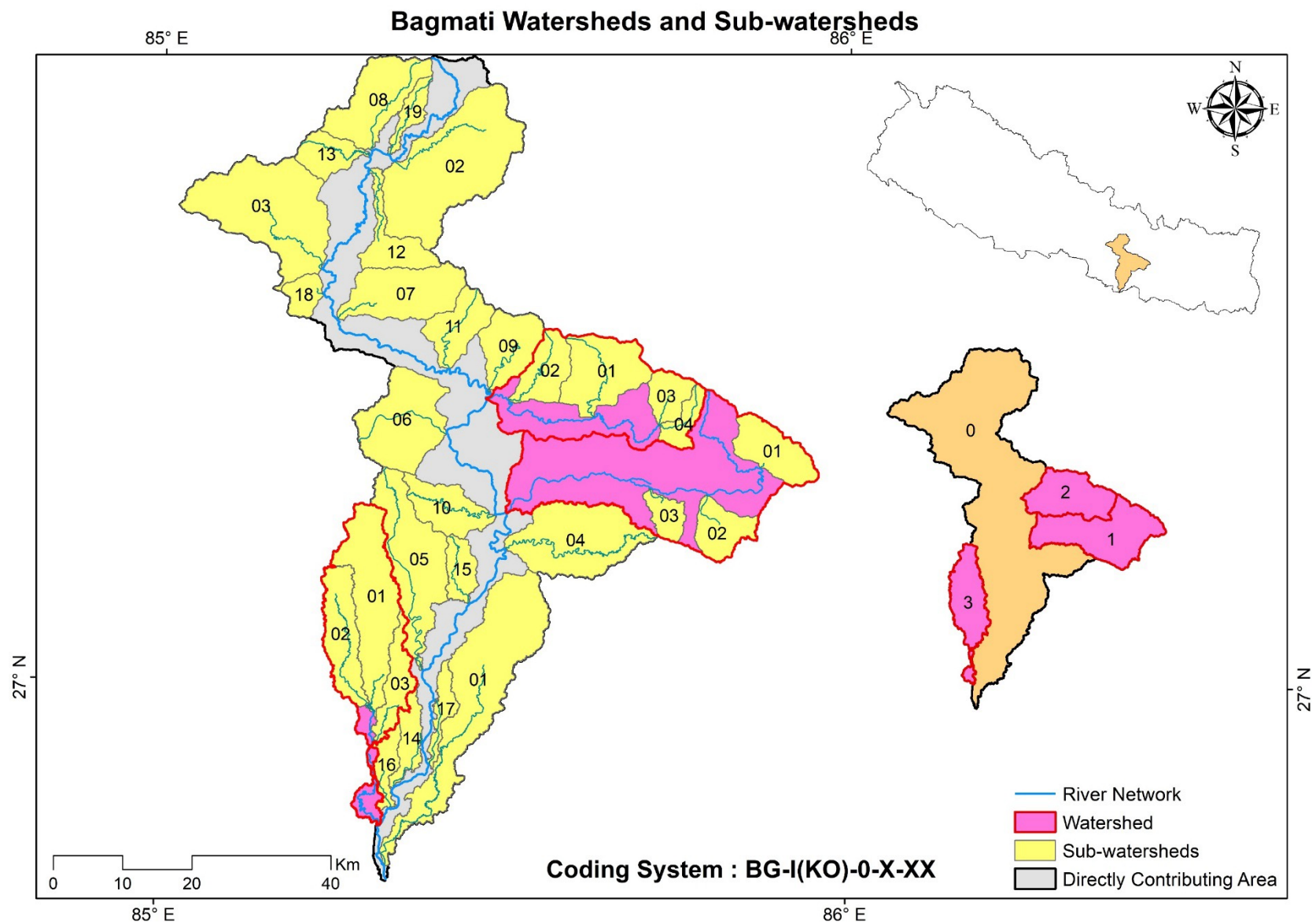


Figure 5-34: Watersheds and sub-watersheds in the Bagmati (independent) Basin, Nepal

5.7 Babai (Independent) Basin

The Babai (independent) Basin, located in the mid-western region of Nepal, includes districts such as Dang, Salyan, and Bardiya. This basin is defined by the Babai River, which drains into the Karnali River beyond the boundary of Nepal. The drainage area of Babai River is 3,422 km² before entering India and ultimately merging with Karnali River. The Babai River originates from the slopes of the Chure hills in Dang district and flows southward through the diverse landscape of the Inner Terai and the Terai plains. The basin shares its borders with the Mahabharat Range to the north and extends towards the fertile southern lowlands. The Babai River is fed by several tributaries, including the Sharada, Guhar and Hapur rivers, which originate from the middle mountain region.

The Babai (Independent) Basin has 20 rivers of Level-2 with area ranging from 21 to 978 km² and 10 rivers of Level-3 with area ranging from 24 to 93 km². The Babai (independent) Basin has 1 sub-basin with area 978 km², no watersheds and 29 sub-watersheds with area range of 20 – 210 km².

The rivers of different levels (Level-2 to Level-4) in the Babai (independent) Basin is tabulated in Annex 14 and the details of sub-basins, watersheds and sub-watersheds within the Babai (independent) Basin in Annex 15. Figure 5-35 to Figure 5-36 depict mapping of HUs in the Babai (independent) Basin.

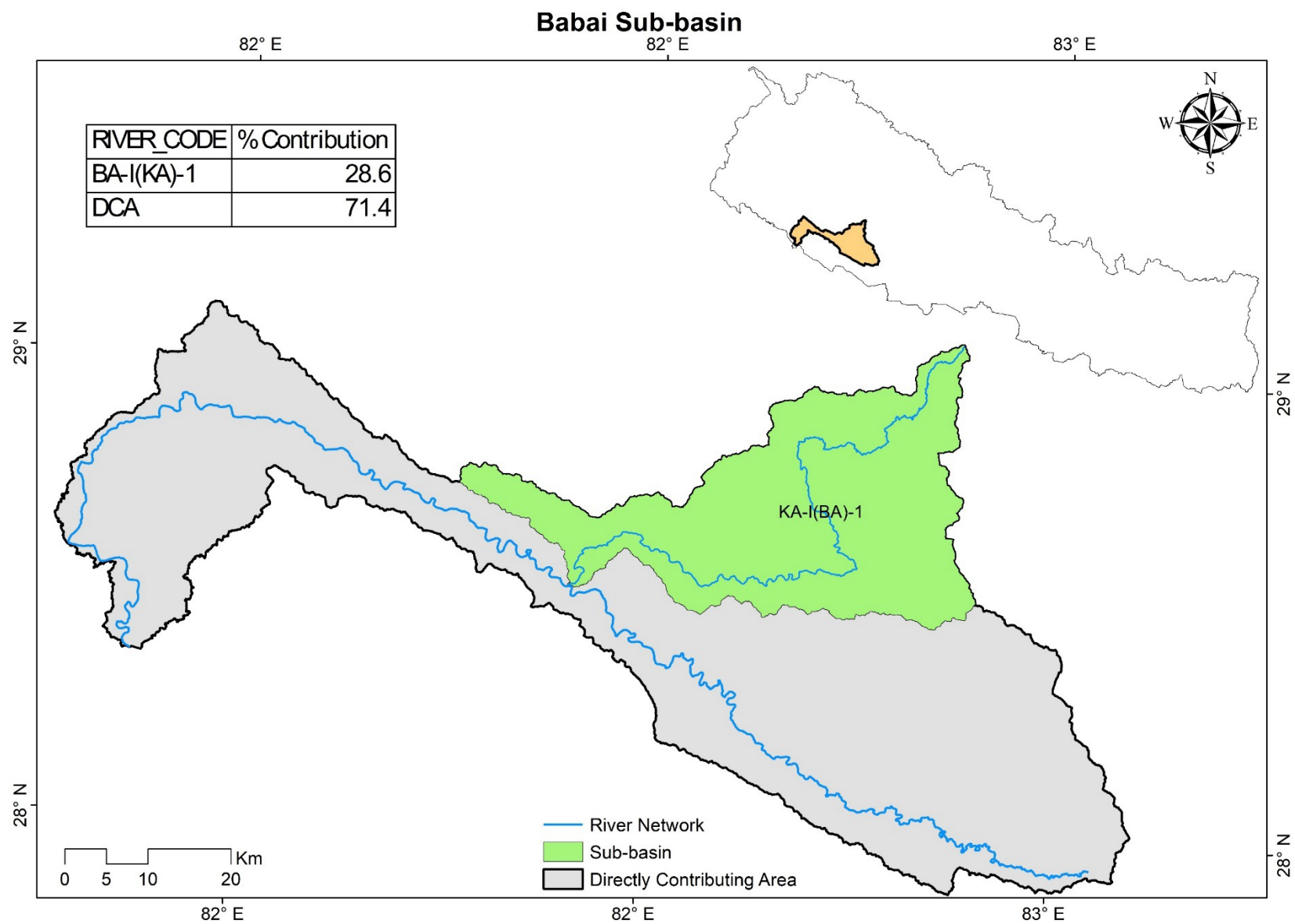


Figure 5-35: Sub-basins in the Babai (independent) Basin, Nepal

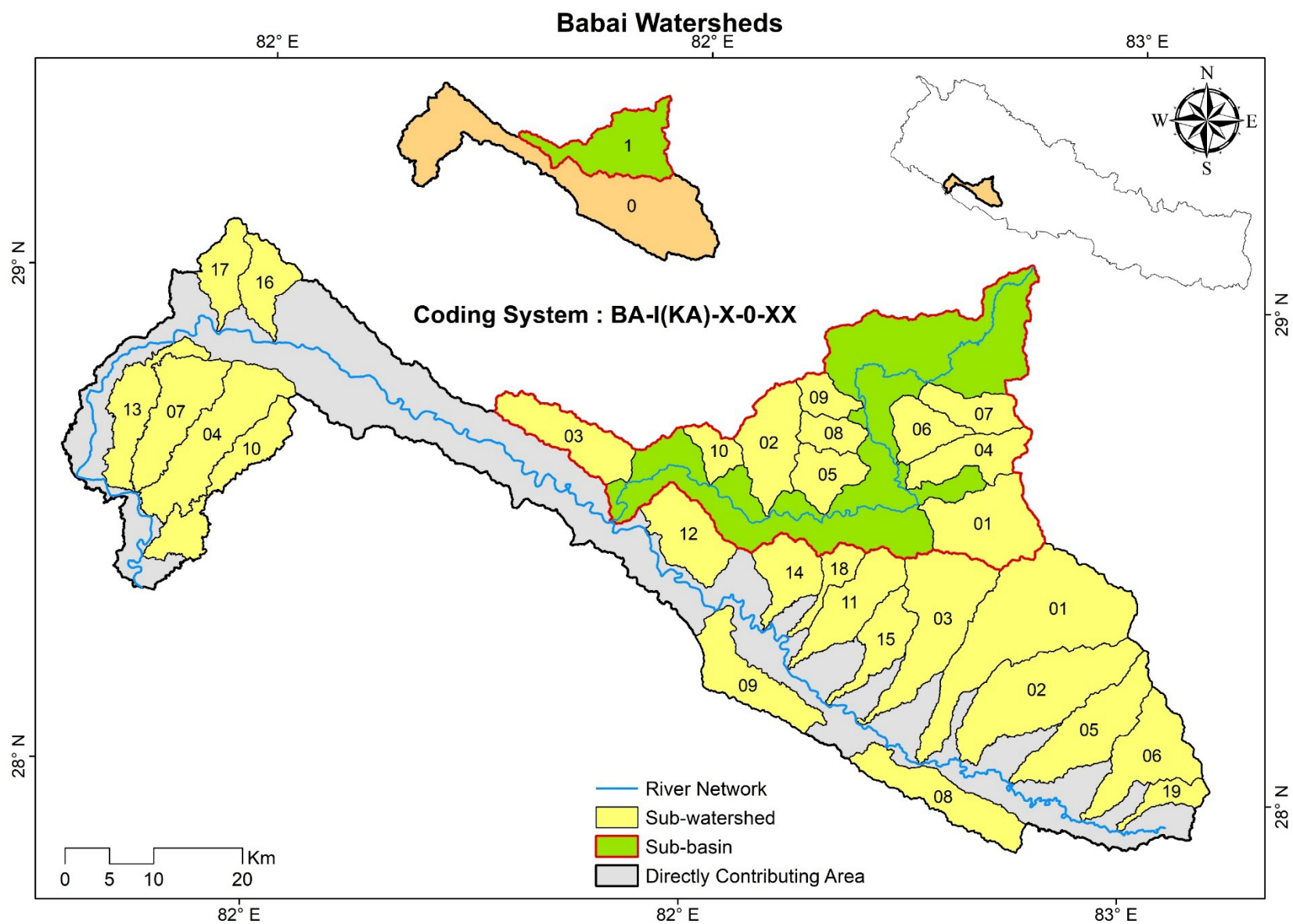


Figure 5-36: Sub-watersheds in the Babai (independent) Basin, Nepal

5.8 Kamala (Independent) Basin

The Kamala (independent) Basin, located in the southeastern part of Nepal, spans across districts such as Sindhuli, Dhanusha, Siraha, and Udayapur. This basin is drained-out by the Kamala River and has drainage area of 2,084 km² in Nepal before entering India. The Kamala River originates from the Chure hills, also known as the Siwalik Range, and flows southward through the inner Terai and the Terai plains before crossing into India where it joins the larger Koshi River system. The Kamala River is fed by several tributaries, including the Tawa, Chadaha, and Sukaha rivers, which originate from the mid-hills in the middle mountain and Chure/Siwalik regions.

The Kamala (Independent) Basin has 14 rivers of Level-2 with area ranging from 27 to 476 km² and 8 rivers of Level-3 with area ranging from 20 to 114 km². The Kamala (independent) basin has no sub-basins, 2 watersheds with area range of 306 - 476 km² and 20 sub-watersheds with area range of 20 - 129 km².

The rivers of different levels (Level-2 to Level-4) in the Kamala (independent) Basin is tabulated in Annex 16 and the details of sub-basins, watersheds and sub-watersheds within the Kamala (independent) Basin in Annex 17. Figure 5-37 to Figure 5-38 depict mapping of HUs in the Kamala (independent) Basin.

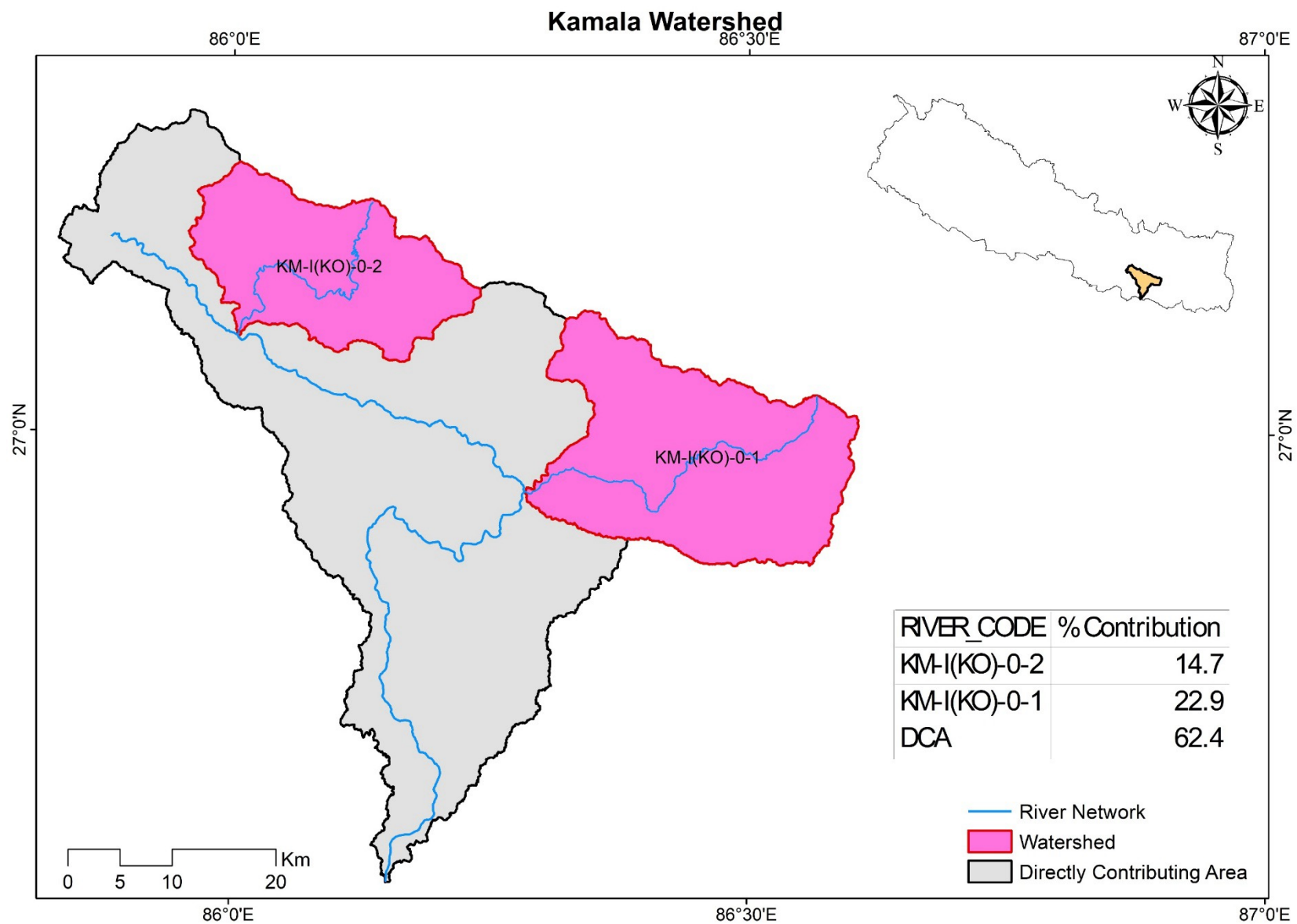


Figure 5-37: Watersheds in the Kamala (independent) Basin, Nepal

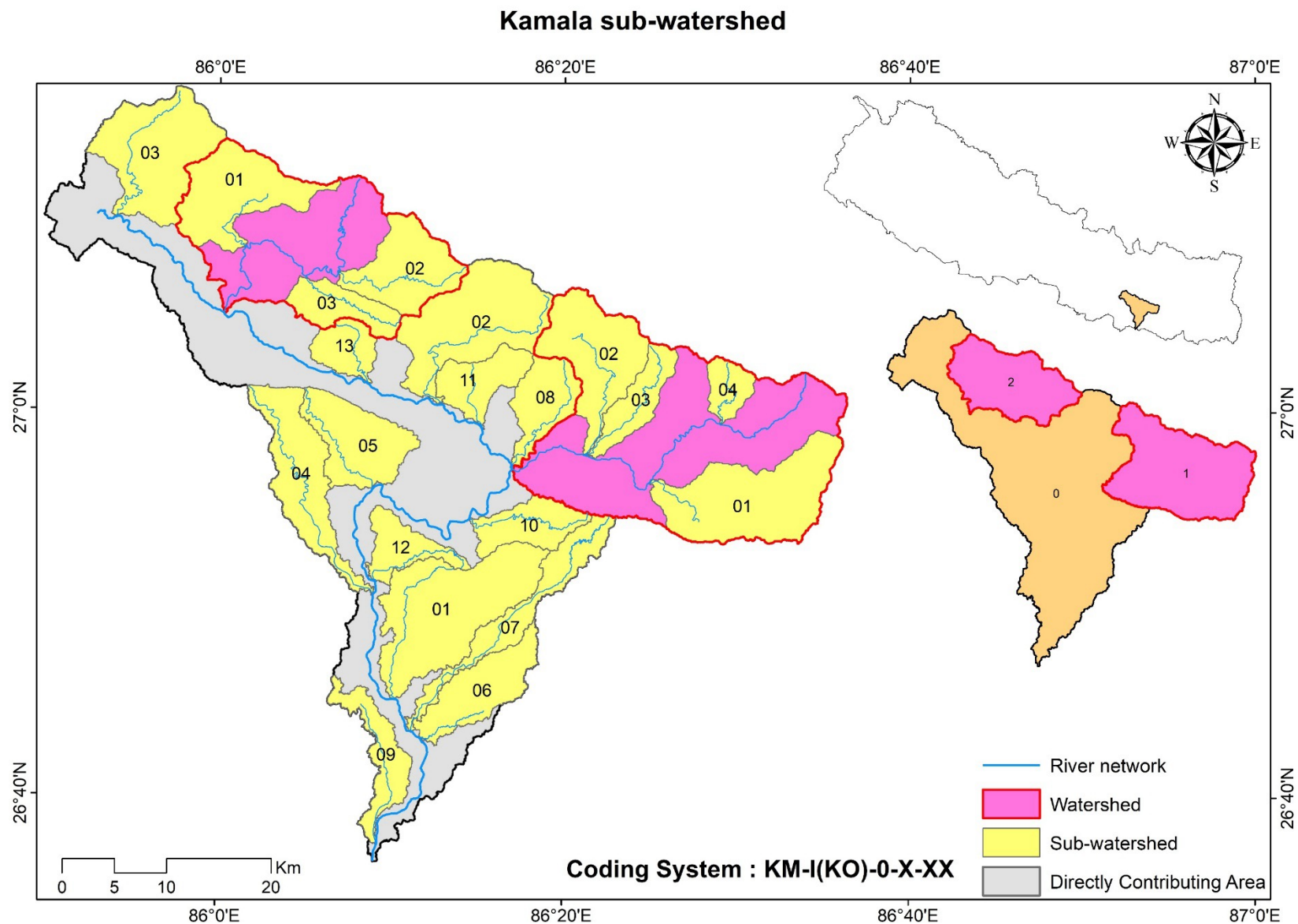


Figure 5-38: Sub-watersheds in the Kamala (independent) Basin, Nepal

5.9 Kankaimai (Independent) Basin

The Kankaimai (independent) Basin, located in the eastern part of Nepal, encompasses districts such as Ilam and Jhapa. This basin is drained-out by Kankaimai River, also known as the Kankai River, and has a drainage area of 1,459 km² in Nepal before entering India. The Kankaimai River originates from the Mahabharat Range in the Ilam district, flowing southward through the diverse landscapes of hills, valleys, and the Terai plains before crossing the border into India. The Kankaimai River is fed by several tributaries, including the Mai Khola, Deumai Khola, and Puwa Khola, which originate from various parts of the middle mountain region.

The Kankaimai (Independent) Basin has 6 rivers of Level-2 with area ranging from 20 to 118 km² and 8 rivers of Level-3 with area ranging from 20 to 286 km². The Kankaimai (independent) Basin does not contain any sub-basins or watersheds and contains 14 sub-watersheds with area range of 20 - 286 km².

The rivers of different levels (Level-2 to Level-4) in the Kankaimai (independent) Basin is tabulated in Annex 18 and the details of sub-basins, watersheds and sub-watersheds within the Kankaimai (independent) Basin in Annex 19. Figure 5-39 depict mapping of HUs in the Kankaimai (independent) Basin.

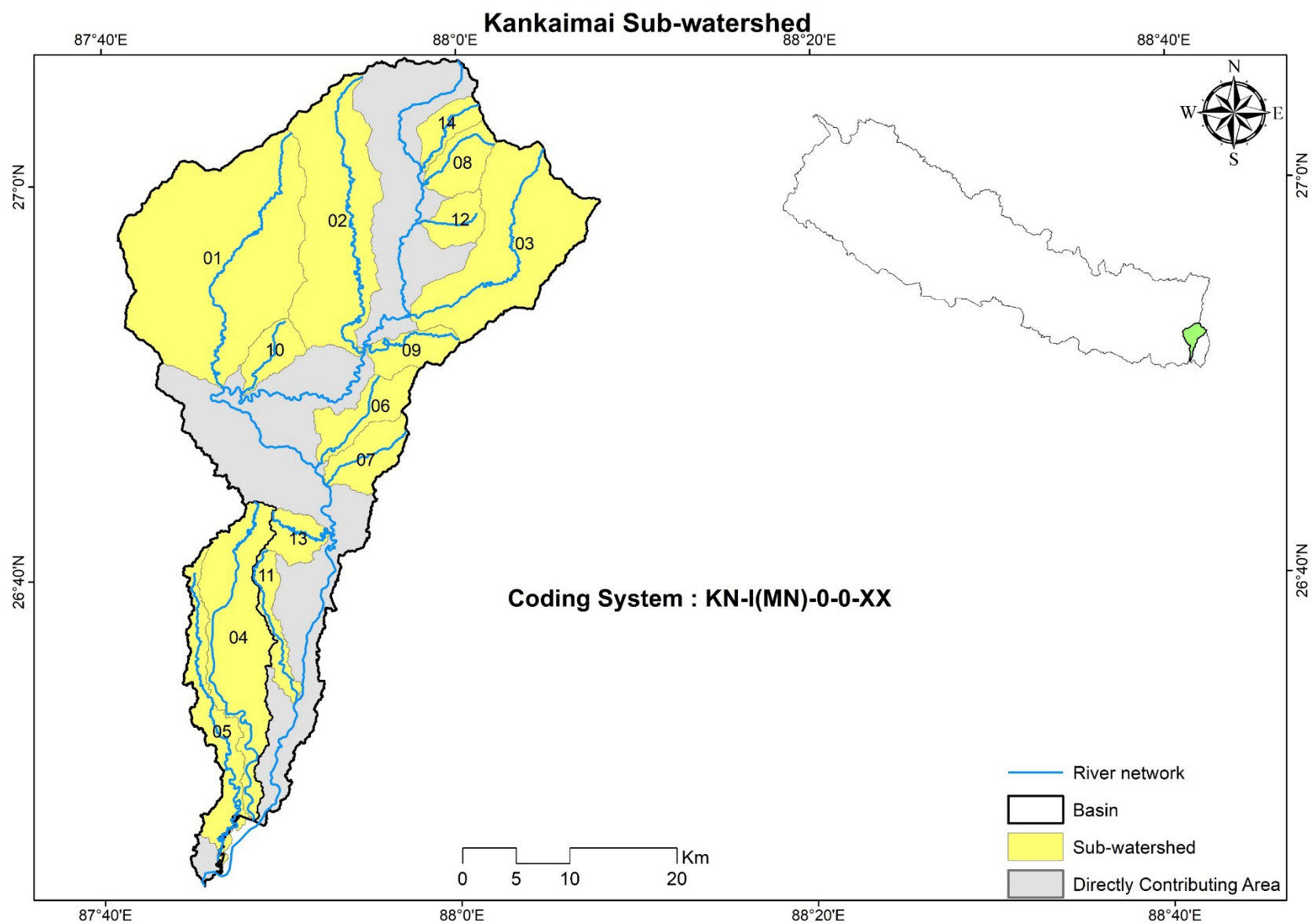


Figure 5-39: Sub-watersheds in the Kankaimai (independent) Basin, Nepal

5.10 Tinau (Independent) Basin

The Tinau (independent) Basin is located in the western part of Nepal, encompasses Palpa and Rupendehi districts. This basin is drained-out by the Tinau River, a significant river system that flows through the hilly and lowland areas of the region. The Tinau River originates from the foothills of the Dhaulagiri and Annapurna ranges, near the town of Tansen in Palpa district. It meanders southward through terraced hillsides before joining the Rapti River in the plains of the Terai beyond the boundary of Nepal. Tinau River is fed by several tributaries, including the Dano and Dobhan Khola, which originate from the surrounding hills and mountains.

The Tinau (Independent) Basin has 4 rivers of Level-2 with area ranging from 90 to 458 km² and 5 rivers of Level-3 with area ranging from 30 to 112 km². The Tinau (independent) Basin does not contain any basin, has 1 watershed with area 458 km² and 8 sub-watersheds with area range of 30 - 178 km².

The rivers of different levels (Level-2 to Level-4) in the Tinau (independent) Basin is tabulated in Annex 20 and the details of sub-basins, watersheds and sub-watersheds within the Tinau (independent) Basin in Annex 21. Figure 5-40 to Figure 5-41 depict mapping of HUs in the Tinau (independent) Basin.

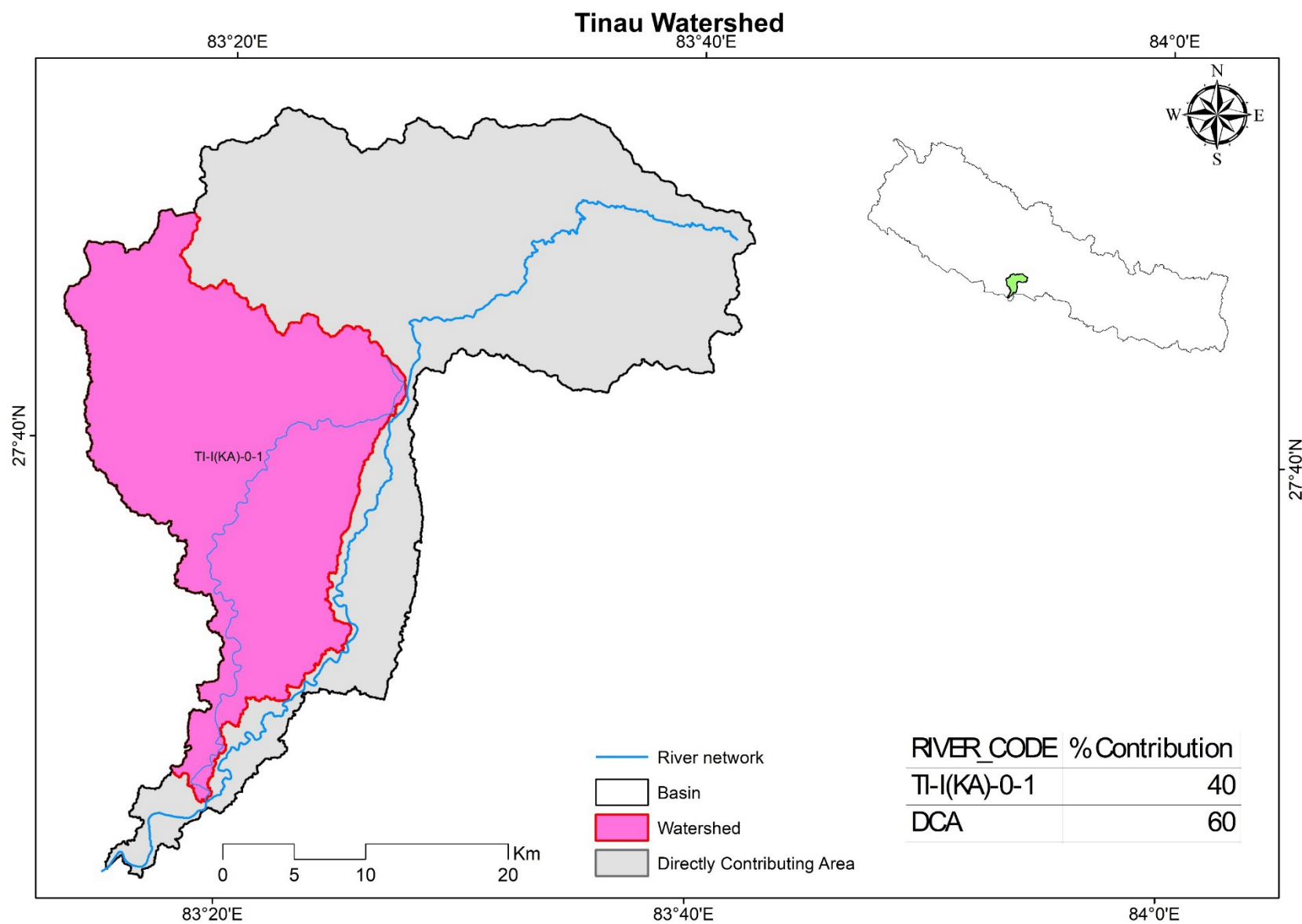


Figure 5-40: Watersheds in the Tinau (independent) Basin, Nepal

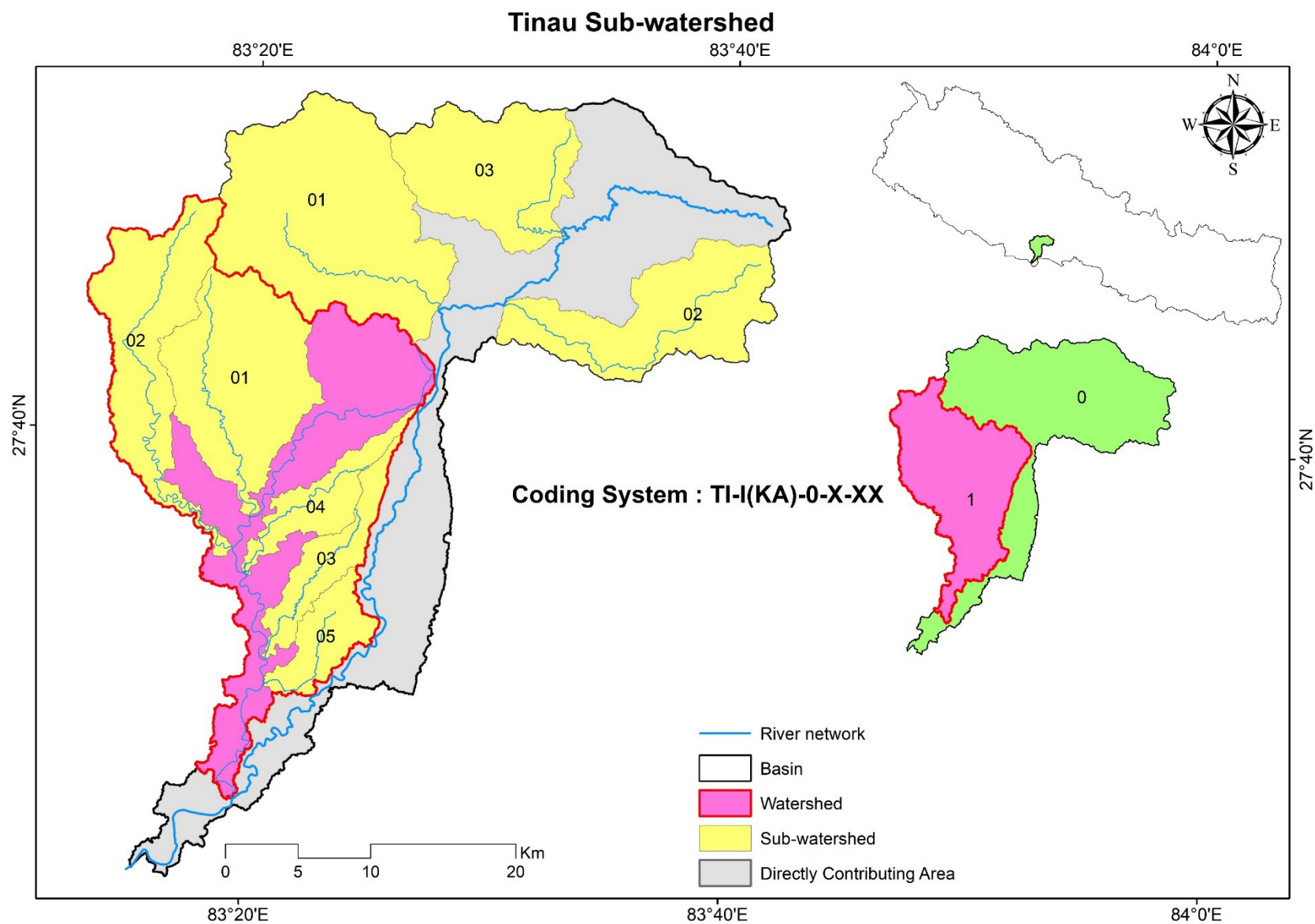


Figure 5-41: Sub-watersheds in the Tinau (independent) Basin, Nepal

5.11 Mechi (Independent) Basin

The Mechi (independent) Basin, located in the easternmost part of Nepal, encompasses Ilam and Jhapa districts. This basin is defined by the Mechi River, which forms part of the Nepal-India border. The Mechi River has drainage area of 857 km², of which, 705 km² lies within Nepal. The Mechi River originates in the high-altitude areas of the Taplejung district, near the Kanchenjunga Conservation Area. From its source, the river flows southward through rugged mountainous terrain, descending into the fertile hills and plains of the Terai before joining the Mahananda River in India. The Mechi River is nourished by several tributaries, including the Siddi and Deuniya Khola, which originate from the mid-hills and converge to form the main river.

The Mechi (Independent) Basin has 5 rivers of Level-2 with area ranging from 39 to 228 km². The Mechi (independent) Basin does not contain any sub-basins or watersheds and has 5 sub-watersheds with area range of 39 – 228 km².

The rivers of different levels (Level-2 to Level-4) in the Mechi (independent) Basin is tabulated in Annex 22 and the details of sub-basins, watersheds and sub-watersheds within the Mechi (independent) Basin in Annex 23. Figure 5-42 depict mapping of HUs in the Mechi (independent) Basin.

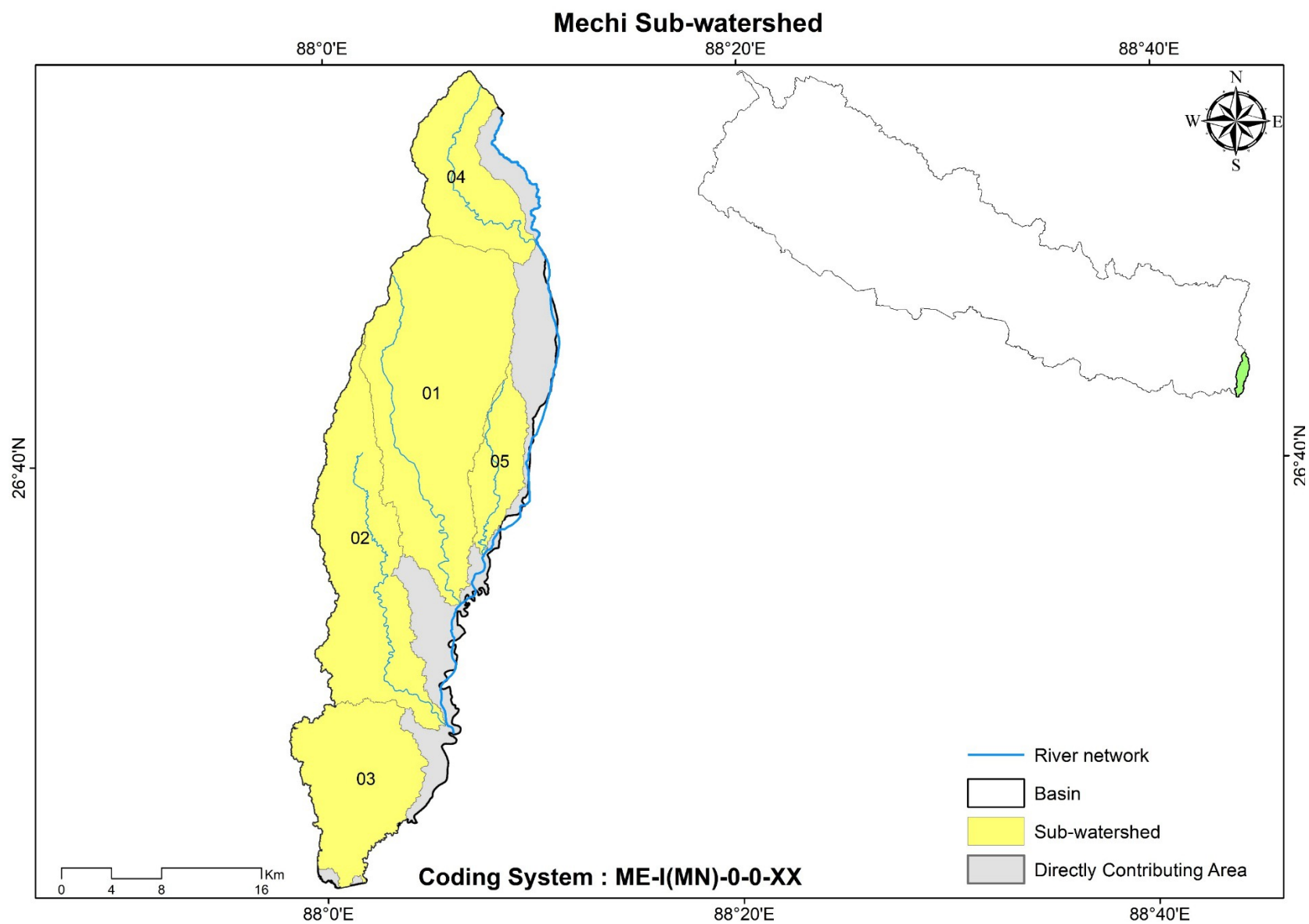


Figure 5-42: Sub-watersheds in the Mehi (independent) Basin, Nepal

6. SUMMARY

In an effort to address inconsistencies in approaches of classifying and naming hydrological units (HUs) in Nepal, this report presents a review of global practices as well as earlier efforts made in Nepal, proposes a criterion for classifying and naming HUs, and presents maps and statistics of the HUs up to four levels of rivers. The criteria were developed through multiple rounds of extensive discussion with related experts and practitioners.

The HUs representing up to four level of rivers are named as basin, basin (independent), sub-basin, watershed and sub-watersheds. Their code length (maximum) consists of following letters: 2 for basin, 8 for basin (independent), 10 for sub-basin, 12 for watershed, and 15 for sub-watershed. There are 1,290 HUs up to four level of rivers are identified In Nepal. They include 4 basins, 7 basin (independent), 28 sub-basins, 71 watersheds, and 1,180 sub-watersheds.

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Annex 1: Sub-watersheds in Nepal – names, drainage areas, and codes

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1	Adhuwa Bairang Khola	1	-	125	125	S01-0-00-17
2	Arra Nala	1	-	148	148	S51-0-00-13
3	Aruwa Nadi	1	-	79	79	S29-0-00-29
4	Bhada Khola	2	Babai	110	110	BA-I(KA)-0-0-04
5	Bhun Khola	3	Babai	40	40	BA-I(KA)-1-0-06
6	Budhi Khola	2	Babai	63	63	BA-I(KA)-0-0-13
7	Chire Gad	2	Babai	46	46	BA-I(KA)-0-0-15
8	Chyati Khola	2	Babai	23	23	BA-I(KA)-0-0-18
9	Dimire Khola	3	Babai	24	24	BA-I(KA)-1-0-10
10	Ghatte Khola	3	Babai	24	24	BA-I(KA)-1-0-09
11	Guhar Khola	2	Babai	210	210	BA-I(KA)-0-0-01
12	Gunta Khola	3	Babai	42	42	BA-I(KA)-1-0-05
13	Hapur Khola	2	Babai	137	137	BA-I(KA)-0-0-02
14	Jangawa Khola	2	Babai	88	88	BA-I(KA)-0-0-05
15	Jum Khola	3	Babai	71	71	BA-I(KA)-1-0-03
16	Kali Nala	2	Babai	42	42	BA-I(KA)-0-0-17
17	Kalleri Khola	2	Babai	67	67	BA-I(KA)-0-0-12
18	Katwa Khola	2	Babai	82	82	BA-I(KA)-0-0-06
19	Korabang Khola	3	Babai	54	54	BA-I(KA)-1-0-04
20	Luham Khola	3	Babai	93	93	BA-I(KA)-1-0-01
21	Makhula Khola	3	Babai	40	40	BA-I(KA)-1-0-07
22	Malai Khola	2	Babai	71	71	BA-I(KA)-0-0-09
23	Mas Khola	3	Babai	71	71	BA-I(KA)-1-0-02
24	Patu Khola	2	Babai	117	117	BA-I(KA)-0-0-03
25	Raj Kula	2	Babai	81	81	BA-I(KA)-0-0-07
26	Ratmati Khola	2	Babai	43	43	BA-I(KA)-0-0-16
27	Suke Khola	3	Babai	26	26	BA-I(KA)-1-0-08
28	Tui Khola	2	Babai	73	73	BA-I(KA)-0-0-08
29	Twang Khola	2	Babai	49	49	BA-I(KA)-0-0-14
30	Gyang Khola	2	Babai	69	69	BA-I(KA)-0-0-10
31	Balim Khola	2	Babai	21	21	BA-I(KA)-0-0-19
32	Baula Khola	2	Babai	67	67	BA-I(KA)-0-0-11
33	Gagan Nadi	2	-	186	186	S21-0-16-01
34	Bankhu Khola	3	Bagmati	105	105	BG-I(KO)-0-2-01
35	Chandi Khola	2	Bagmati	155	155	BG-I(KO)-0-0-05
36	Chau Khola	3	Bagmati	58	58	BG-I(KO)-0-2-02
37	Chauda Khola	2	Bagmati	135	135	BG-I(KO)-0-0-06
38	Chiruwa Khola	2	Bagmati	67	67	BG-I(KO)-0-0-10

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
39	Durlung Khola	2	Bagmati	63	63	BG-I(KO)-0-0-11
40	Ekadasi Nala	2	Bagmati	27	27	BG-I(KO)-0-0-17
41	Gaghar Khola	4	Bagmati	53	53	BG-I(KO)-0-1-02
42	Ipa Khola	2	Bagmati	26	26	BG-I(KO)-0-0-18
43	Khani Khola	2	Bagmati	72	72	BG-I(KO)-0-0-09
44	Khani Khola	2	Bagmati	113	113	BG-I(KO)-0-0-07
45	Kulekhani Khola	2	Bagmati	222	222	BG-I(KO)-0-0-03
46	Kyan Khola	2	Bagmati	160	160	BG-I(KO)-0-0-04
47	Marin Khola	4	Bagmati	71	71	BG-I(KO)-0-1-01
48	Nakhu Khola	2	Bagmati	57	57	BG-I(KO)-0-0-12
49	Paurai Khola	2	Bagmati	35	35	BG-I(KO)-0-0-15
50	Phulbari Khola	4	Bagmati	29	29	BG-I(KO)-0-1-03
51	Rampur Khola	3	Bagmati	37	37	BG-I(KO)-0-2-03
52	Tamajor Khola	3	Bagmati	29	29	BG-I(KO)-0-2-04
53	Manohara Khola	2	Bagmati	257	257	BG-I(KO)-0-0-02
54	Pathalaiya Nala	2	Bagmati	264	264	BG-I(KO)-0-0-01
55	Lohiniya Khola	3	Bagmati	153	153	BG-I(KO)-0-3-01
56	Dhobi Khola	2	Bagmati	26	26	BG-I(KO)-0-0-19
57	Gujara Khola	3	Bagmati	86	86	BG-I(KO)-0-3-02
58	Bishnumati Nadi	2	Bagmati	102	102	BG-I(KO)-0-0-08
59	Bhabhari Nala	2	Bagmati	36	36	BG-I(KO)-0-0-14
60	Chandi Nala	3	Bagmati	51	51	BG-I(KO)-0-3-03
61	Chamargoda Nala	2	Bagmati	29	29	BG-I(KO)-0-0-16
62	Balkhu Khola	2	Bagmati	44	44	BG-I(KO)-0-0-13
63	Kajala Nala	2	-	26	26	S06-0-12-04
64	Katnu Nala	2	-	27	27	S06-0-12-03
65	Nunsari Khola	2	-	82	82	S06-0-12-01
66	Solti Khola	2	-	74	74	S06-0-12-02
67	Cheka Khola	2	-	78	78	S07-0-08-03
68	Chisang Khola	2	-	204	204	S07-0-08-01
69	Das Khola	2	-	90	90	S07-0-08-02
70	Mariya Bakraha Khola	2	-	52	52	S07-0-08-04
71	Balan Khola	2	-	39	39	S18-0-10-04
72	Chahaka Khola	2	-	110	110	S18-0-10-01
73	Jhirari Khola	3	-	52	52	S18-0-10-03
74	Khutti Nadi	2	-	103	103	S18-0-10-02
75	Mutani Nadi	2	-	22	22	S18-0-10-05

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
76	Balhor Dundra	2	-	20	20	S49-0-01-06
77	Bel Khola	2	-	167	167	S49-0-01-02
78	Belwa Gurudwa Khola	2	-	181	181	S49-0-01-01
79	Dhungre Khola	2	-	70	70	S49-0-01-05
80	Ghorahi Nala	2	-	105	105	S49-0-01-04
81	Kaila Khola	2	-	139	139	S49-0-01-03
82	Bangari Nadi	1	-	203	203	S32-0-00-07
83	Aurahi Khola	2	-	44	44	S22-0-02-03
84	Bigahi Nadi	2	-	24	24	S22-0-02-05
85	Ghagar Nadi	2	-	154	154	S22-0-02-02
86	Jamuni Nadi	2	-	494	494	S22-0-02-01
87	-	2	-	22	22	S22-0-02-06
88	Sukhajor Nadi	2	-	33	33	S22-0-02-04
89	Bihul Nadi	1	-	118	118	S17-0-00-20
90	Ghagara Khola	2	-	45	45	S02-0-13-02
91	Surunga Khola	2	-	34	34	S02-0-13-03
92	Tangting Khola	2	-	135	135	S02-0-13-01
93	Budhi Nadi	1	-	239	239	S11-0-00-04
94	Gachhiya Khola	2	-	123	123	S10-0-19-01
95	Mugu Khola	2	-	22	22	S10-0-19-03
96	Tenggra Khola	2	-	44	44	S10-0-19-02
97	Amkhaiya Nala	2	-	41	41	S55-0-06-05
98	Bahuni Khola	2	-	121	121	S55-0-06-01
99	Champa Nadi	2	-	54	54	S55-0-06-04
100	Rautela Khola	2	-	29	29	S55-0-06-06
101	Saj Khola	2	-	55	55	S55-0-06-02
102	Sukha Khola	2	-	55	55	S55-0-06-03
103	Chitaha Khola	1	-	84	84	S41-0-00-27
104	Banhara Nadi	2	-	136	136	S54-0-04-02
105	Gajar Khola	2	-	84	84	S54-0-04-03
106	Kharra Nala	2	-	29	29	S54-0-04-06
107	Lamniya Nala	2	-	79	79	S54-0-04-04
108	Machheli Khola	2	-	65	65	S54-0-04-05
109	Sisne Nala	2	-	21	21	S54-0-04-07
110	Syali Nadi	2	-	190	190	S54-0-04-01
111	Gad Nadi	1	-	152	152	S35-0-00-12
112	Gairhawa Nadi	1	-	64	64	S46-0-00-32

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
113	Ghatta Khola	3	Gandaki	22	22	GA-3-0-25
114	Judhi Khola	2	Gandaki	27	27	GA-0-0-14
115	Serang Khola	3	Gandaki	29	29	GA-3-0-20
116	Serang Khola	3	Gandaki	62	62	GA-3-0-11
117	Sindhure Khola	4	Gandaki	60	60	GA-2-1-03
118	Soti Khola	4	Gandaki	43	43	GA-4-1-03
119	Tardi Khola	3	Gandaki	21	21	GA-4-0-21
120	Hudi Khola	4	Gandaki	29	29	GA-4-2-05
121	Tatopani (ilep) Khola	4	Gandaki	130	130	GA-3-1-02
122	Tendrang Khola	3	Gandaki	30	30	GA-3-0-19
123	Thopal Khola	3	Gandaki	256	256	GA-2-0-04
124	Thorang Khola	3	Gandaki	150	150	GA-4-0-05
125	Tom (dogni) Khola	3	Gandaki	40	40	GA-3-0-01
126	Trishuli Khola	3	Gandaki	59	59	GA-2-0-11
127	Udilung Khola	4	Gandaki	25	25	GA-3-2-06
128	Yangdol Khola	4	Gandaki	64	64	GA-3-2-04
129	Hugdi Khola	2	Gandaki	54	54	GA-0-0-08
130	Yaru Khola	3	Gandaki	76	76	GA-3-0-07
131	Kolpu Khola	3	Gandaki	171	171	GA-2-0-05
132	Lapang Khola	4	Gandaki	31	31	GA-3-1-07
133	Larke Khola	3	Gandaki	78	78	GA-3-0-06
134	Hinang Khola	3	Gandaki	118	118	GA-3-0-03
135	Istul Khola	3	Gandaki	68	68	GA-3-0-09
136	Akhu Khola	4	Gandaki	49	49	GA-3-1-05
137	Aphal Khola	4	Gandaki	33	33	GA-3-1-06
138	Athahra Saya Khola	3	Gandaki	50	50	GA-3-0-14
139	Baguwa Khola	4	Gandaki	25	25	GA-3-1-09
140	Belkhu Khola	3	Gandaki	88	88	GA-2-0-09
141	Belkot Khola	4	Gandaki	31	31	GA-2-1-05
142	Jarang Khola	4	Gandaki	26	26	GA-4-2-06
143	Bhalu Khola	3	Gandaki	72	72	GA-3-0-08
144	Bhotekoshi Nadi	3	Gandaki	286	286	GA-2-0-01
145	Bhusundi Khola	4	Gandaki	30	30	GA-4-2-04
146	Bhyaure Khola	3	Gandaki	50	50	GA-2-0-14
147	Chaichangwa Khola	3	Gandaki	33	33	GA-4-0-15

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
148	Chake Khola	4	Gandaki	69	69	GA-2-1-02
149	Changmam Khola	4	Gandaki	75	75	GA-3-2-03
150	Charaundi Khola	2	Gandaki	47	47	GA-0-0-09
151	Chhahare Khola	3	Gandaki	47	47	GA-4-0-13
152	Chhargandi Khola	3	Gandaki	26	26	GA-3-0-22
153	Chhilung Khola	3	Gandaki	198	198	GA-3-0-02
154	Julu Khola	3	Gandaki	35	35	GA-4-0-14
155	Chilime Khola	3	Gandaki	205	205	GA-2-0-02
156	China Khola	3	Gandaki	24	24	GA-4-0-18
157	Chopche Khola	4	Gandaki	31	31	GA-2-2-03
158	Chudi Khola	3	Gandaki	110	110	GA-4-0-08
159	Dana Khola	3	Gandaki	129	129	GA-4-0-07
160	Darkhu Khola	4	Gandaki	49	49	GA-2-1-04
161	Jyadul Khola	3	Gandaki	66	66	GA-3-0-10
162	Dobhan Khola	3	Gandaki	91	91	GA-3-0-05
163	Dordi Khola	3	Gandaki	352	352	GA-4-0-02
164	Dudh Khola	3	Gandaki	389	389	GA-4-0-01
165	Gandak Khani Khola	4	Gandaki	73	73	GA-3-1-03
166	Ganesh Kunda Khola	4	Gandaki	21	21	GA-2-2-06
167	Gangapurna Khola	3	Gandaki	55	55	GA-4-0-11
168	Beldiya Khola	2	Gandaki	39	39	GA-0-0-10
169	Betari Khola	3	Gandaki	49	49	GA-5-0-13
170	Caunra Khola	3	Gandaki	24	24	GA-5-0-19
171	Dandjor Nadi	2	Gandaki	89	89	GA-0-0-03
172	Dangre Khola	3	Gandaki	38	38	GA-0-1-01
173	Deusat Khola	2	Gandaki	67	67	GA-0-0-07
174	-	4	Gandaki	29	29	GA-2-2-05
175	Dhungre Khola	3	Gandaki	94	94	GA-5-0-07
176	Dumarsot Khola	3	Gandaki	20	20	GA-5-0-23
177	Gadar Khola	2	Gandaki	128	128	GA-0-0-02
178	Gindri Khola	2	Gandaki	72	72	GA-0-0-05
179	Harda Khola	3	Gandaki	54	54	GA-5-0-09
180	Jayasri Khola	2	Gandaki	31	31	GA-0-0-13
181	Chepe Khola	3	Gandaki	310	310	GA-4-0-03
182	Jyamire Khola	3	Gandaki	25	25	GA-0-1-04
183	Kanaha Khola	2	Gandaki	73	73	GA-0-0-04

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
184	Karra Khola	3	Gandaki	126	126	GA-5-0-05
185	Katle Khola (Hasta Khola)	3	Gandaki	25	25	GA-5-0-18
186	Kerunga Ghol	3	Gandaki	82	82	GA-5-0-08
187	Khageri Khola	3	Gandaki	380	380	GA-5-0-03
188	Khahare Khola	3	Gandaki	20	20	GA-0-1-05
189	Khahare Khola	2	Gandaki	38	38	GA-0-0-12
190	Lansisa Glacier	4	Gandaki	55	55	GA-2-2-01
191	Khakara Khola	3	Gandaki	29	29	GA-0-1-02
192	Kisede Khola	3	Gandaki	41	41	GA-5-0-15
193	Lothar Khola	3	Gandaki	173	173	GA-5-0-04
194	Maiga Khola	3	Gandaki	35	35	GA-5-0-17
195	Manahari Khola	3	Gandaki	428	428	GA-5-0-02
196	Mandu Khola	3	Gandaki	21	21	GA-5-0-22
197	Okhai Khola	3	Gandaki	21	21	GA-5-0-21
198	Pantale Khola	3	Gandaki	44	44	GA-5-0-14
199	Reu Khola	3	Gandaki	462	462	GA-5-0-01
200	Samari Khola	3	Gandaki	119	119	GA-5-0-06
201	Sarakari Ghol	3	Gandaki	51	51	GA-5-0-12
202	Shobhapur Khola	3	Gandaki	35	35	GA-5-0-16
203	Stamai Ghol	3	Gandaki	54	54	GA-5-0-10
204	Sunai Khola	3	Gandaki	29	29	GA-0-1-03
205	Twangra Khola	3	Gandaki	24	24	GA-5-0-20
206	Pancha Nadi	2	Gandaki	29	29	GA-0-0-11
207	Khar Khola	4	Gandaki	58	58	GA-4-2-01
208	Arung Khola	2	Gandaki	273	273	GA-0-0-01
209	Badel Khola	3	Gandaki	52	52	GA-5-0-11
210	Ban Khola	2	Gandaki	20	20	GA-0-0-15
211	NULL	4	Gandaki	70	70	GA-1-3-02
212	Lima Khola	3	Gandaki	23	23	GA-6-0-18
213	Lumdi Khola	3	Gandaki	60	60	GA-1-0-23
214	Khare Khola	4	Gandaki	21	21	GA-2-1-07
215	Madkyu Khola	4	Gandaki	73	73	GA-6-1-04
216	Madme Khola	4	Gandaki	56	56	GA-6-1-06
217	Magar Khola	3	Gandaki	26	26	GA-1-0-44
218	Maldi Khola	3	Gandaki	106	106	GA-1-0-16
219	Malyangdi Khola	4	Gandaki	21	21	GA-1-3-07
220	Marang Khola	4	Gandaki	57	57	GA-1-2-05

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
221	Mardi Khola	3	Gandaki	142	142	GA-6-0-02
222	Mathura Khola	4	Gandaki	74	74	GA-1-4-04
223	Mristi Khola	3	Gandaki	303	303	GA-1-0-07
224	Mudi Khola	4	Gandaki	251	251	GA-1-2-01
225	Myagde Khola	3	Gandaki	69	69	GA-6-0-06
226	Adhi Khola	3	Gandaki	477	477	GA-1-0-01
227	Narsing Khola	3	Gandaki	116	116	GA-1-0-15
228	Nhichung Khola	3	Gandaki	378	378	GA-1-0-03
229	Nisdi Khola	3	Gandaki	227	227	GA-1-0-11
230	Nisi Khola	4	Gandaki	230	230	GA-1-1-03
231	Khol Khola	4	Gandaki	21	21	GA-4-2-07
232	Palung Khola	3	Gandaki	35	35	GA-1-0-34
233	Panda Khola	3	Gandaki	60	60	GA-1-0-22
234	Pandur Khola	3	Gandaki	26	26	GA-1-0-42
235	Pangpu Khola	3	Gandaki	40	40	GA-1-0-30
236	Alaiche Khola	3	Gandaki	24	24	GA-1-0-48
237	Khudi Khola	3	Gandaki	137	137	GA-4-0-06
238	Parung Khola	3	Gandaki	240	240	GA-1-0-10
239	Pati Khola	4	Gandaki	41	41	GA-1-3-05
240	Amaka Khola	3	Gandaki	21	21	GA-1-0-53
241	Phulmadi Khola	3	Gandaki	23	23	GA-1-0-49
242	Phurse Khola	3	Gandaki	29	29	GA-1-0-39
243	Phusre Khola	3	Gandaki	166	166	GA-6-0-01
244	Pirung Khola	3	Gandaki	33	33	GA-6-0-13
245	Ghatte Khola	3	Gandaki	24	24	GA-4-0-19
246	Kintang Khola	4	Gandaki	57	57	GA-3-1-04
247	Pongkyu Khola	3	Gandaki	37	37	GA-1-0-32
248	Puyung Khola	3	Gandaki	55	55	GA-1-0-25
249	Ramdi Khola	3	Gandaki	46	46	GA-1-0-28
250	Rati Khola	4	Gandaki	67	67	GA-1-3-03
251	Raughat Khola	3	Gandaki	349	349	GA-1-0-05
252	Risti Khola	4	Gandaki	63	63	GA-6-1-05
253	Ritung Khola	4	Gandaki	71	71	GA-1-2-04
254	Rudi Khola	4	Gandaki	104	104	GA-6-1-02
255	Rupse Khola	3	Gandaki	22	22	GA-1-0-50
256	Sadhu Khola	3	Gandaki	28	28	GA-6-0-16
257	Samarkyung Khola	3	Gandaki	33	33	GA-1-0-36

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
258	Sangboche Khola	3	Gandaki	29	29	GA-1-0-37
259	Sange Khola	4	Gandaki	81	81	GA-6-1-03
260	Saraudi Khola	3	Gandaki	93	93	GA-6-0-05
261	Sardi Khola	3	Gandaki	37	37	GA-6-0-11
262	Seti Khola	3	Gandaki	139	139	GA-1-0-13
263	Seti Khola	3	Gandaki	32	32	GA-6-0-14
264	Koshi Khola	3	Gandaki	57	57	GA-2-0-12
265	Arje Khola	4	Gandaki	25	25	GA-1-2-10
266	Singkos Khola	4	Gandaki	36	36	GA-1-2-08
267	Sisne Khola	4	Gandaki	77	77	GA-1-4-03
268	Sisne Khola	4	Gandaki	26	26	GA-1-1-10
269	Syang Khola	3	Gandaki	47	47	GA-1-0-27
270	Tama Khola	3	Gandaki	28	28	GA-1-0-40
271	Langtang Glacier	4	Gandaki	29	29	GA-2-2-04
272	Taman Khola	4	Gandaki	227	227	GA-1-1-04
273	Tangge Khola	3	Gandaki	253	253	GA-1-0-09
274	Thapa Khola	3	Gandaki	60	60	GA-1-0-24
275	Theule Khola	3	Gandaki	85	85	GA-1-0-18
276	Thini Khola	3	Gandaki	73	73	GA-1-0-20
277	Kuntung Khola	4	Gandaki	23	23	GA-2-1-06
278	Aul Khola	3	Gandaki	26	26	GA-1-0-43
279	Yangdi Khola	3	Gandaki	30	30	GA-6-0-15
280	Karaudi Khola	3	Gandaki	21	21	GA-1-0-54
281	Dhami Khola	3	Gandaki	308	308	GA-1-0-06
282	Labse Khola	4	Gandaki	276	276	GA-4-1-02
283	-	4	Gandaki	22	22	GA-1-1-12
284	Bagali Khola	4	Gandaki	51	51	GA-1-4-05
285	Barandi Khola	3	Gandaki	24	24	GA-1-0-47
286	Bardi Khola	4	Gandaki	31	31	GA-6-1-08
287	Laja Khola	4	Gandaki	38	38	GA-2-2-02
288	Beg Khola	3	Gandaki	21	21	GA-1-0-52
289	Betini Khola	3	Gandaki	45	45	GA-1-0-29
290	Bhaise Khola	4	Gandaki	49	49	GA-1-4-06
291	Bhim Khola	4	Gandaki	98	98	GA-1-1-07
292	Bhuji Khola	4	Gandaki	144	144	GA-1-1-05
293	Bhurungdi Khola	4	Gandaki	88	88	GA-1-3-01
294	Midim Khola	4	Gandaki	178	178	GA-6-1-01
295	Bijayapur Khola	3	Gandaki	65	65	GA-6-0-07

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
296	Buldi Khola	3	Gandaki	55	55	GA-6-0-08
297	Charang Khola	3	Gandaki	270	270	GA-1-0-08
298	Chaurban Khola	4	Gandaki	37	37	GA-1-2-07
299	Chhabdi Khola	3	Gandaki	22	22	GA-6-0-19
300	Chhaldi Khola	4	Gandaki	409	409	GA-1-1-01
301	Ghatte Khola	4	Gandaki	43	43	GA-4-1-04
302	Langdang Khola	4	Gandaki	113	113	GA-3-2-01
303	Kothi Khola	3	Gandaki	61	61	GA-1-0-21
304	Chhomrong Khola	4	Gandaki	40	40	GA-1-3-06
305	Chilungpa Khola	3	Gandaki	444	444	GA-1-0-02
306	Chipli Khola	4	Gandaki	24	24	GA-6-1-11
307	Chokhopani Khola	3	Gandaki	25	25	GA-1-0-45
308	Dang Khola	4	Gandaki	28	28	GA-1-2-09
309	Dar Khola	4	Gandaki	78	78	GA-1-2-03
310	Daram Khola	4	Gandaki	337	337	GA-1-1-02
311	Darling Khola	4	Gandaki	40	40	GA-1-1-08
312	Deusat Khola	3	Gandaki	36	36	GA-1-0-33
313	Dhand Khola	3	Gandaki	54	54	GA-6-0-09
314	Dhechyang Khola	3	Gandaki	358	358	GA-1-0-04
315	Dhingkyo Khola	3	Gandaki	24	24	GA-1-0-46
316	Dihul Khola	3	Gandaki	47	47	GA-6-0-10
317	Doba Khola	3	Gandaki	22	22	GA-1-0-51
318	-	4	Gandaki	40	40	GA-1-2-06
319	Jhong Khola	3	Gandaki	92	92	GA-1-0-17
320	Dungre Khola	3	Gandaki	38	38	GA-1-0-31
321	Ghar Khola	3	Gandaki	76	76	GA-1-0-19
322	Gurusangba Khola	3	Gandaki	35	35	GA-1-0-35
323	Hugdi Khola	4	Gandaki	131	131	GA-1-1-06
324	Idi Khola	4	Gandaki	25	25	GA-6-1-10
325	Jumdi Khola	4	Gandaki	23	23	GA-1-1-11
326	Jwala Khola	3	Gandaki	28	28	GA-1-0-41
327	Jyagdi Khola	3	Gandaki	26	26	GA-6-0-17
328	Jyagdi Khola	3	Gandaki	198	198	GA-1-0-12
329	Kachi Khola	4	Gandaki	118	118	GA-1-4-01
330	Kalesti Khola	4	Gandaki	42	42	GA-6-1-07
331	Likhu Khola	4	Gandaki	166	166	GA-2-1-01
332	Kali Khola	3	Gandaki	35	35	GA-6-0-12

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
333	Kathe Khola	3	Gandaki	118	118	GA-1-0-14
334	Keduwa Khola	4	Gandaki	112	112	GA-1-4-02
335	Khalte Khola	4	Gandaki	27	27	GA-6-1-09
336	Kimrong Khola	4	Gandaki	61	61	GA-1-3-04
337	Kotre Khola	3	Gandaki	106	106	GA-6-0-03
338	Kunaban Khola	4	Gandaki	95	95	GA-1-2-02
339	Ludi Khola	4	Gandaki	57	57	GA-4-2-02
340	Kurung Khola	3	Gandaki	29	29	GA-1-0-38
341	Kyadusyo Khola	4	Gandaki	21	21	GA-6-1-12
342	Kyangdi Khola	3	Gandaki	97	97	GA-6-0-04
343	Labdi Khola	4	Gandaki	30	30	GA-1-1-09
344	Lamahe Khola	3	Gandaki	48	48	GA-1-0-26
345	Machha Khola	3	Gandaki	106	106	GA-3-0-04
346	Mahesh Khola	3	Gandaki	273	273	GA-2-0-03
347	Malekhu Khola	3	Gandaki	101	101	GA-2-0-08
348	Maltung Khola	3	Gandaki	114	114	GA-2-0-07
349	Mangpang Khola	3	Gandaki	32	32	GA-3-0-18
350	Maste Khola	3	Gandaki	27	27	GA-3-0-21
351	Menchet Khola	4	Gandaki	144	144	GA-3-1-01
352	-	3	Gandaki	29	29	GA-4-0-16
353	Myaldi Khola	3	Gandaki	61	61	GA-4-0-10
354	Nadi Khola	3	Gandaki	218	218	GA-4-0-04
355	Pungen Glacier	3	Gandaki	50	50	GA-3-0-15
356	Nimrung Khola	3	Gandaki	60	60	GA-3-0-12
357	Sonam Glacier	3	Gandaki	26	26	GA-3-0-23
358	Paudi Khola	3	Gandaki	84	84	GA-4-0-09
359	Phache Khola	3	Gandaki	21	21	GA-4-0-20
360	Phalakhu Khola	3	Gandaki	147	147	GA-2-0-06
361	Phaudi Khola	3	Gandaki	26	26	GA-4-0-17
362	Gyalma Khola	3	Gandaki	21	21	GA-3-0-26
363	Phu Khola	4	Gandaki	453	453	GA-4-1-01
364	Phujel Khola	3	Gandaki	23	23	GA-3-0-24
365	Phurhung Khola	4	Gandaki	38	38	GA-3-2-05
366	Rangrung Khola	4	Gandaki	34	34	GA-4-2-03
367	Richet Khola	3	Gandaki	58	58	GA-3-0-13
368	Rigdi Khola	2	Gandaki	71	71	GA-0-0-06
369	Hahang Khola	4	Gandaki	29	29	GA-3-1-08
370	Sabje Khola	3	Gandaki	51	51	GA-4-0-12

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
371	Salakhu Khola	3	Gandaki	86	86	GA-2-0-10
372	Samari Khola	3	Gandaki	54	54	GA-2-0-13
373	Samno Khola	3	Gandaki	33	33	GA-3-0-17
374	Sangle Khola	3	Gandaki	36	36	GA-3-0-16
375	Sarpu Khola	4	Gandaki	93	93	GA-3-2-02
376	Sarti Khola	4	Gandaki	21	21	GA-3-2-07
377	Gauriya Khola	1	-	64	64	S04-0-00-31
378	Ghonghi Nadi	1	-	145	145	S45-0-00-15
379	Ghordaha Nadi	1	-	90	90	S15-0-00-25
380	Hardi Nadi	1	-	129	129	S25-0-00-16
381	Bhaluhi Khola	2	-	55	55	S43-0-17-03
382	Dhanewa Nadi	2	-	103	103	S43-0-17-01
383	Pusaha Khola	2	-	47	47	S43-0-17-04
384	Skhaura Khola	2	-	64	64	S43-0-17-02
385	Jhim Nadi	1	-	236	236	S26-0-00-05
386	Kajara Dhar	1	-	191	191	S16-0-00-09
387	Baidyanath Khola	3	Kamala	114	114	KM-I(KO)-0-1-01
388	Belsot Khola	2	Kamala	38	38	KM-I(KO)-0-0-10
389	Bhalu Khola	3	Kamala	65	65	KM-I(KO)-0-2-02
390	Bhedwa Khola	2	Kamala	32	32	KM-I(KO)-0-0-12
391	Bichitra Khola	2	Kamala	27	27	KM-I(KO)-0-0-13
392	Chapleti Khola	3	Kamala	20	20	KM-I(KO)-0-1-04
393	Charnath Khola	2	Kamala	77	77	KM-I(KO)-0-0-04
394	Dudhauri Khola	3	Kamala	42	42	KM-I(KO)-0-0-08
395	Gwang Khola	2	Kamala	99	99	KM-I(KO)-0-0-03
396	Jirga Khola	3	Kamala	79	79	KM-I(KO)-0-2-01
397	Kakur Khola	3	Kamala	82	82	KM-I(KO)-0-1-02
398	Langur Khola	3	Kamala	35	35	KM-I(KO)-0-2-03
399	Maruwa Khola	3	Kamala	34	34	KM-I(KO)-0-1-03
400	Selar Khola	2	Kamala	64	64	KM-I(KO)-0-0-05
401	Suklaha Khola	2	Kamala	129	129	KM-I(KO)-0-0-01
402	Talakha Khola	2	Kamala	38	38	KM-I(KO)-0-0-11
403	Thakur Khola	2	Kamala	109	109	KM-I(KO)-0-0-02
404	Sarbi Dhar	2	Kamala	39	39	KM-I(KO)-0-0-09
405	Kataniya Khola	2	Kamala	55	55	KM-I(KO)-0-0-06
406	Ghulmi Khola	2	Kamala	55	55	KM-I(KO)-0-0-07
407	Deumai Khola	3	Kankaimai	286	286	KN-I(MN)-0-0-01
408	Dhuwa Khola	2	Kankaimai	20	20	KN-I(MN)-0-0-14

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
409	Garuwa Khola	3	Kankaimai	33	33	KN-I(MN)-0-0-07
410	Ingala Khola	2	Kankaimai	29	29	KN-I(MN)-0-0-08
411	Jogmai Khola	3	Kankaimai	153	153	KN-I(MN)-0-0-03
412	Kamal Khola	2	Kankaimai	118	118	KN-I(MN)-0-0-04
413	Kankaimai Nadi	2	Kankaimai	60	60	KN-I(MN)-0-0-05
414	Karphok Khola	2	Kankaimai	26	26	KN-I(MN)-0-0-09
415	Lal Khola	3	Kankaimai	21	21	KN-I(MN)-0-0-13
416	Lodiya Khola	3	Kankaimai	36	36	KN-I(MN)-0-0-06
417	Malu Khola	2	Kankaimai	22	22	KN-I(MN)-0-0-12
418	Puwa Khola	3	Kankaimai	159	159	KN-I(MN)-0-0-02
419	Satasi Khola	3	Kankaimai	23	23	KN-I(MN)-0-0-11
420	Sya Khola	3	Kankaimai	23	23	KN-I(MN)-0-0-10
421	Dhung Gad Khola	3	Karnali	133	133	KA-3-0-12
422	Dil Gad	3	Karnali	30	30	KA-3-0-33
423	Dogada Khola	4	Karnali	45	45	KA-3-1-13
424	Dogade Khola	2	Karnali	20	20	KA-0-0-37
425	Dogaira Gad	3	Karnali	77	77	KA-3-0-16
426	Dumai Khola	4	Karnali	25	25	KA-1-2-11
427	Dungri Gad	3	Karnali	42	42	KA-3-0-27
428	Dwari Gad	3	Karnali	42	42	KA-3-0-26
429	Dwari Gad	3	Karnali	37	37	KA-3-0-32
430	Dwari Khola	3	Karnali	23	23	KA-6-0-10
431	Gaddi Gad	3	Karnali	173	173	KA-3-0-09
432	Gadsera Gad	3	Karnali	155	155	KA-7-0-01
433	Gairi Gad	4	Karnali	24	24	KA-3-1-20
434	Gala Gad	3	Karnali	45	45	KA-3-0-25
435	Galli Gad	4	Karnali	23	23	KA-1-1-13
436	Galpa Gad	3	Karnali	105	105	KA-2-0-05
437	Gam Gad	3	Karnali	125	125	KA-4-0-02
438	Garpung Khola	3	Karnali	71	71	KA-1-0-18
439	Ghalje Khola	4	Karnali	27	27	KA-2-2-11
440	Ghatechaur Khola	3	Karnali	39	39	KA-1-0-25
441	Ghatganga Khola	3	Karnali	350	350	KA-3-0-02
442	Ghatte Khola	4	Karnali	20	20	KA-5-1-12
443	-	4	Karnali	32	32	KA-2-2-09
444	Ghatte Khola	4	Karnali	36	36	KA-2-2-06
445	Ghodashain Khola	4	Karnali	24	24	KA-5-2-02

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
446	Gidi Khola	3	Karnali	193	193	KA-5-0-04
447	Gija Gad	3	Karnali	56	56	KA-1-0-22
448	Gilang Khola	4	Karnali	44	44	KA-4-2-08
449	Girighat Khola	3	Karnali	51	51	KA-1-0-23
450	Gochhe Khola	3	Karnali	105	105	KA-1-0-09
451	Godare Khola	3	Karnali	39	39	KA-3-0-31
452	Golma Gad	3	Karnali	39	39	KA-3-0-30
453	Goru Khola	3	Karnali	67	67	KA-5-0-06
454	Gothi Khola	3	Karnali	101	101	KA-2-0-06
455	Gudpal Khola	3	Karnali	30	30	KA-3-0-34
456	-	4	Karnali	73	73	KA-2-3-04
457	Gurgure Khola	3	Karnali	37	37	KA-2-0-12
458	Halji Khola	4	Karnali	31	31	KA-2-3-06
459	Hepka Khola	3	Karnali	163	163	KA-2-0-03
460	Holu Khola	3	Karnali	59	59	KA-1-0-21
461	Ikdi Gad	4	Karnali	87	87	KA-3-1-04
462	Jadari Gad	3	Karnali	157	157	KA-3-0-10
463	Jahari Khola	3	Karnali	186	186	KA-1-0-03
464	Jairi Khola	4	Karnali	96	96	KA-1-1-06
465	Jaldi Gad	3	Karnali	191	191	KA-1-0-02
466	Jaljala Khola	4	Karnali	65	65	KA-5-1-02
467	Jhula Khola	3	Karnali	29	29	KA-5-0-11
468	Jhumre Khola	4	Karnali	60	60	KA-1-4-03
469	Jhupra Khola	3	Karnali	89	89	KA-1-0-14
470	Jhyanglung Khola	4	Karnali	119	119	KA-4-1-06
471	Jijadi Gad	4	Karnali	41	41	KA-3-1-15
472	Jima Khola	3	Karnali	22	22	KA-4-0-11
473	Jogad Khola	3	Karnali	43	43	KA-5-0-07
474	Jugai Khola	3	Karnali	84	84	KA-1-0-16
475	Juil Gad	3	Karnali	48	48	KA-3-0-22
476	Juli Odar Khola	3	Karnali	247	247	KA-5-0-03
477	Kailash Khola	4	Karnali	278	278	KA-3-1-01
478	Kala Gad	3	Karnali	73	73	KA-3-0-17
479	Kali Khola	3	Karnali	20	20	KA-1-0-36
480	Kalpani Khola	3	Karnali	28	28	KA-1-0-31
481	Kamala Nadi	3	Karnali	41	41	KA-7-0-04
482	Kang Khola	3	Karnali	58	58	KA-4-0-05

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
483	Kangja Khola	4	Karnali	77	77	KA-4-2-04
484	Kanjirowa Khola	4	Karnali	74	74	KA-4-1-14
485	Kanjirowa Khola	4	Karnali	102	102	KA-1-5-01
486	Kapadi Khola	3	Karnali	132	132	KA-7-0-02
487	Kara Khola	2	Karnali	24	24	KA-0-0-31
488	Karanga Khola	3	Karnali	32	32	KA-2-0-13
489	Karmanas Gad	3	Karnali	128	128	KA-7-0-03
490	Kasa Gad	4	Karnali	57	57	KA-3-1-07
491	Katti Khola	3	Karnali	155	155	KA-6-0-02
492	Keheing Khola	4	Karnali	253	253	KA-4-1-03
493	Alle Khola	4	Karnali	111	111	KA-1-1-05
494	Khahare Khola	3	Karnali	34	34	KA-1-0-26
495	Khairala Khola	3	Karnali	40	40	KA-7-0-05
496	Khare Khola	4	Karnali	74	74	KA-5-1-01
497	Khati Khola	4	Karnali	55	55	KA-1-1-10
498	Khetyad Khola	2	Karnali	299	299	KA-0-0-01
499	Khulli Khola	2	Karnali	107	107	KA-0-0-07
500	Khung Khola	4	Karnali	71	71	KA-4-1-17
501	Kodari Gad	4	Karnali	68	68	KA-3-1-05
502	Kogi Khola	4	Karnali	127	127	KA-4-2-01
503	Kogichwa Khola	4	Karnali	46	46	KA-4-2-07
504	Koireli Gad	3	Karnali	24	24	KA-3-0-37
505	Koltadi Khola	2	Karnali	73	73	KA-0-0-11
506	Ana Gad	3	Karnali	41	41	KA-3-0-29
507	Korang Khola	4	Karnali	110	110	KA-4-1-10
508	Kudilla Khola	3	Karnali	30	30	KA-2-0-15
509	Kuliban Khola	3	Karnali	92	92	KA-1-0-13
510	Kulla Gad	3	Karnali	22	22	KA-2-0-19
511	Kumara Gad	3	Karnali	39	39	KA-7-0-06
512	Kunda Khola	2	Karnali	221	221	KA-0-0-03
513	Kunwa Khola	3	Karnali	26	26	KA-2-0-16
514	Kwalungwa Khola	3	Karnali	195	195	KA-2-0-02
515	Lachama Khola	4	Karnali	118	118	KA-2-2-03
516	Lachhi Gad	3	Karnali	48	48	KA-3-0-23
517	Lahaghat Khola	3	Karnali	21	21	KA-1-0-35
518	Lapha Gad	2	Karnali	59	59	KA-0-0-14
519	Lare Khola	4	Karnali	84	84	KA-2-2-04
520	Laregonba Khola	4	Karnali	31	31	KA-2-2-10

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
521	Lepche Khola	3	Karnali	37	37	KA-8-0-05
522	Lihi Khola	4	Karnali	45	45	KA-5-1-04
523	Limbu Khola	2	Karnali	31	31	KA-0-0-24
524	Limne Khola	3	Karnali	20	20	KA-2-0-20
525	Lisni Gad	3	Karnali	41	41	KA-3-0-28
526	Lode Gad	2	Karnali	30	30	KA-0-0-25
527	Logu Khola	3	Karnali	28	28	KA-4-0-08
528	Babila Khola	3	Karnali	68	68	KA-5-0-05
529	Luma Khola	3	Karnali	90	90	KA-4-0-03
530	Lungreli Gad	4	Karnali	28	28	KA-3-1-18
531	Luruppa Khola	4	Karnali	292	292	KA-2-2-01
532	Madi Khola	4	Karnali	20	20	KA-3-1-21
533	Mahendra Mali Khola	4	Karnali	31	31	KA-5-1-06
534	Mait Khola	4	Karnali	73	73	KA-4-1-15
535	Mala Gad	4	Karnali	121	121	KA-3-1-02
536	Mana Gad	4	Karnali	26	26	KA-3-1-19
537	Marma Khola	3	Karnali	113	113	KA-1-0-08
538	Matela Khola	3	Karnali	27	27	KA-6-0-08
539	Melti Khola	3	Karnali	26	26	KA-3-0-35
540	Mimibang Khola	4	Karnali	371	371	KA-2-1-02
541	Moga Khola	4	Karnali	43	43	KA-4-1-21
542	Muglu Khola	4	Karnali	170	170	KA-1-2-05
543	Mukdem Khola	4	Karnali	71	71	KA-4-1-16
544	Bade Khola	2	Karnali	22	22	KA-0-0-34
545	Musi Khola	4	Karnali	101	101	KA-4-1-11
546	Musyang Khola	4	Karnali	60	60	KA-2-1-04
547	Nagong Khola	4	Karnali	340	340	KA-4-1-02
548	Nehar Khola	3	Karnali	41	41	KA-2-0-10
549	Neti Khola	3	Karnali	61	61	KA-8-0-03
550	Badkhi Khola	3	Karnali	22	22	KA-5-0-13
551	Nikas Khola	3	Karnali	103	103	KA-1-0-10
552	Nilkati Khola	3	Karnali	22	22	KA-3-0-41
553	Ning Khola	4	Karnali	29	29	KA-2-3-07
554	Ning Khola	4	Karnali	239	239	KA-2-2-02
555	Nune Gad	3	Karnali	74	74	KA-1-0-17
556	Nuwaghari Gad	3	Karnali	134	134	KA-3-0-11
557	Obang Khola	3	Karnali	31	31	KA-1-0-28

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
558	Odi Khola	4	Karnali	23	23	KA-5-1-09
559	Padam Khola	3	Karnali	64	64	KA-6-0-04
560	Paduka Gad	2	Karnali	90	90	KA-0-0-08
561	Paima Khola	2	Karnali	66	66	KA-0-0-13
562	Parajuli Khola	3	Karnali	154	154	KA-6-0-03
563	Pathar Khola	4	Karnali	47	47	KA-5-1-03
564	Pelma Khola	4	Karnali	996	996	KA-1-2-01
565	Peni Palat Khola	4	Karnali	80	80	KA-1-5-03
566	Phala Gad	2	Karnali	36	36	KA-0-0-21
567	Phanda Khola	4	Karnali	24	24	KA-4-1-26
568	Phedi Khola	3	Karnali	59	59	KA-1-0-20
569	Phoigar Khola	3	Karnali	27	27	KA-1-0-32
570	Phor Khola	4	Karnali	22	22	KA-4-1-28
571	Phu Gad	2	Karnali	40	40	KA-0-0-18
572	Phulam Khola	2	Karnali	28	28	KA-0-0-28
573	Phulching Khola	4	Karnali	28	28	KA-1-1-12
574	Phupharka Khola	3	Karnali	54	54	KA-2-0-09
575	Pogade Khola	2	Karnali	21	21	KA-0-0-36
576	Polte Khola	4	Karnali	197	197	KA-4-1-05
577	Prabhali Gad	4	Karnali	50	50	KA-3-1-10
578	Puiya Khola	3	Karnali	24	24	KA-2-0-18
579	Pukcheng Khola	4	Karnali	67	67	KA-4-1-18
580	Puma Khola	4	Karnali	55	55	KA-1-2-06
581	Puwe Khola	4	Karnali	40	40	KA-4-1-23
582	Raha Gad	2	Karnali	138	138	KA-0-0-05
583	Baj Gad	4	Karnali	22	22	KA-5-1-10
584	Rakabu Khola	4	Karnali	36	36	KA-2-2-07
585	Rakse Urai Khola	3	Karnali	47	47	KA-3-0-24
586	Ram Gad	2	Karnali	165	165	KA-0-0-04
587	Ranga Gad	4	Karnali	235	235	KA-1-4-02
588	Rani Gad	3	Karnali	23	23	KA-3-0-39
589	-	3	Karnali	46	46	KA-1-0-24
590	Raphu Khola	4	Karnali	41	41	KA-4-1-22
591	Rati Khola	3	Karnali	27	27	KA-6-0-07
592	Rauli Khola	4	Karnali	104	104	KA-2-1-03
593	Regil Khola	2	Karnali	36	36	KA-0-0-20
594	Rigda Khola	3	Karnali	33	33	KA-4-0-07
595	Rip Gad	3	Karnali	55	55	KA-2-0-08

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
596	Riusa Khola	3	Karnali	36	36	KA-4-0-06
597	Rohati Khola	2	Karnali	23	23	KA-0-0-33
598	Rudi Khola	2	Karnali	28	28	KA-0-0-29
599	Ruka Khola	4	Karnali	90	90	KA-4-1-12
600	Rukum Gad	4	Karnali	289	289	KA-1-2-03
601	Rum Khola	3	Karnali	23	23	KA-4-0-10
602	Rup Gad Khola	4	Karnali	162	162	KA-1-1-04
603	Ruru Bangchu Khola	3	Karnali	383	383	KA-5-0-01
604	Sakayal Khola	3	Karnali	238	238	KA-3-0-04
605	Sakya Khola	4	Karnali	151	151	KA-2-3-02
606	Salimor Khola	3	Karnali	254	254	KA-3-0-03
607	Salle Khola	3	Karnali	23	23	KA-7-0-07
608	Salli Khola	3	Karnali	152	152	KA-2-0-04
609	Salma Khola	4	Karnali	76	76	KA-1-3-04
610	Samuha Gad	3	Karnali	68	68	KA-3-0-19
611	Sangrahi Khola	3	Karnali	126	126	KA-1-0-06
612	Sani Gad	4	Karnali	161	161	KA-3-2-01
613	Sannido Gad	2	Karnali	119	119	KA-0-0-06
614	Sarani Gad	4	Karnali	47	47	KA-3-1-11
615	Saru Khola	4	Karnali	318	318	KA-1-3-02
616	Satdawa Khola	2	Karnali	55	55	KA-0-0-15
617	Bali Gad	3	Karnali	31	31	KA-5-0-09
618	Sayali Gad	3	Karnali	186	186	KA-3-0-08
619	Sepu Khola	4	Karnali	46	46	KA-1-4-04
620	Sera Khola	2	Karnali	30	30	KA-0-0-26
621	Serog Khola	3	Karnali	22	22	KA-4-0-12
622	Shobha Khola	3	Karnali	85	85	KA-4-0-04
623	Sije Khola	4	Karnali	60	60	KA-4-1-19
624	Simarawa Khola	4	Karnali	47	47	KA-3-1-12
625	Simla Gad	3	Karnali	25	25	KA-5-0-12
626	Simta Khola	3	Karnali	94	94	KA-1-0-12
627	Simtari Gad	4	Karnali	61	61	KA-3-1-06
628	Sir Khola	3	Karnali	23	23	KA-3-0-40
629	Sisne Khola	4	Karnali	243	243	KA-1-2-04
630	Sokar Gad	4	Karnali	29	29	KA-3-2-02
631	Sot Khola	3	Karnali	153	153	KA-1-0-04
632	Sot Khola	3	Karnali	28	28	KA-6-0-06

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
633	Suli Gad	4	Karnali	959	959	KA-1-1-02
634	Sulung Khola	4	Karnali	114	114	KA-4-1-09
635	Sumdo Khola	4	Karnali	117	117	KA-4-1-07
636	Suni Gad	3	Karnali	213	213	KA-3-0-06
637	Suwa Gad	4	Karnali	413	413	KA-1-3-01
638	Swaksa Khola	4	Karnali	77	77	KA-4-1-13
639	Syangbang Khola	3	Karnali	424	424	KA-3-0-01
640	Syaule Khola	2	Karnali	22	22	KA-0-0-35
641	Tagre Khola	4	Karnali	57	57	KA-4-1-20
642	Taisolu Khola	4	Karnali	96	96	KA-2-3-03
643	Take Khola	4	Karnali	612	612	KA-2-1-01
644	Takla Khola	4	Karnali	355	355	KA-4-1-01
645	Taksu Khola	3	Karnali	96	96	KA-1-0-11
646	Takya Khola	4	Karnali	59	59	KA-4-2-05
647	Talak Khola	4	Karnali	111	111	KA-4-2-02
648	Talamera Khola	2	Karnali	77	77	KA-0-0-10
649	Talkot Gad	3	Karnali	72	72	KA-3-0-18
650	Talkoti Gad	3	Karnali	82	82	KA-3-0-15
651	Talung Khola	4	Karnali	35	35	KA-2-2-08
652	Tangkya Khola	4	Karnali	115	115	KA-4-1-08
653	Tangtungge Khola	4	Karnali	29	29	KA-1-5-04
654	Tangur Khola	3	Karnali	32	32	KA-2-0-14
655	Tani Khola	3	Karnali	38	38	KA-6-0-05
656	Tarap Khola	4	Karnali	584	584	KA-1-1-03
657	Tarkesya Nadi	3	Karnali	41	41	KA-2-0-11
658	Tartang Khola	4	Karnali	227	227	KA-4-1-04
659	Taru Gad	3	Karnali	99	99	KA-3-0-14
660	Tattar Gad	3	Karnali	25	25	KA-1-0-33
661	Telpani Khola	3	Karnali	29	29	KA-1-0-30
662	Telung Khola	4	Karnali	276	276	KA-2-3-01
663	Banganga Khola	4	Karnali	28	28	KA-5-1-07
664	Thalari Gad	3	Karnali	49	49	KA-3-0-21
665	Thini Khola	2	Karnali	24	24	KA-0-0-32
666	Thuli Ganga Nadi	4	Karnali	54	54	KA-3-1-09
667	Banggad Khola	3	Karnali	131	131	KA-1-0-05
668	Thuli Palat Khola	4	Karnali	21	21	KA-1-5-05
669	Til Khola	4	Karnali	49	49	KA-2-3-05

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
670	Tipada Gad	4	Karnali	42	42	KA-3-1-14
671	Tipgad Khola	2	Karnali	250	250	KA-0-0-02
672	Titatiya Khola	3	Karnali	55	55	KA-8-0-04
673	Tubang Khola	4	Karnali	39	39	KA-1-2-10
674	Tuda Gad	3	Karnali	112	112	KA-3-0-13
675	Tumkot Khola	3	Karnali	66	66	KA-2-0-07
676	Tumling Khola	4	Karnali	38	38	KA-2-2-05
677	Um Khola	3	Karnali	29	29	KA-5-0-10
678	Uttar Ganga Nadi	4	Karnali	486	486	KA-1-2-02
679	Yalakot Khola	4	Karnali	71	71	KA-1-1-07
680	Yangchu Khola	3	Karnali	24	24	KA-2-0-17
681	Yenjam Khola	4	Karnali	51	51	KA-4-2-06
682	Juddi Khola	2	Karnali	81	81	KA-0-0-09
683	Bare Khola	4	Karnali	20	20	KA-5-1-11
684	Bargaun Khola	4	Karnali	39	39	KA-1-2-09
685	Barju Gad	4	Karnali	56	56	KA-3-1-08
686	Bharbung Khola	4	Karnali	1863	1863	KA-1-1-01
687	Ambasa Khola	3	Karnali	65	65	KA-0-1-01
688	Gumna Nadi	2	Karnali	52	52	KA-0-0-16
689	Jhamati Khola	3	Karnali	52	52	KA-0-1-02
690	Orai Khola	3	Karnali	25	25	KA-0-1-04
691	Orai Khola	2	Karnali	29	29	KA-0-1-03
692	Bhadali Nala	2	Karnali	26	26	KA-0-0-30
693	Basante Khola	3	Karnali	87	87	KA-1-0-15
694	Battise Khola	3	Karnali	31	31	KA-1-0-27
695	Bau Khola	4	Karnali	26	26	KA-5-1-08
696	Bauli Gad	4	Karnali	109	109	KA-3-1-03
697	Bauli Gad	3	Karnali	205	205	KA-3-0-07
698	Belkher Khola	2	Karnali	69	69	KA-0-0-12
699	Betan Khola	2	Karnali	29	29	KA-0-0-27
700	-	3	Karnali	31	31	KA-1-0-29
701	Bharta Gad	3	Karnali	41	41	KA-5-0-08
702	Bheri Khola	3	Karnali	309	309	KA-5-0-02
703	Bhitta Paduwa Khola	4	Karnali	83	83	KA-1-5-02
704	Bhius Khola	4	Karnali	117	117	KA-1-3-03
705	Bhuka Khola	2	Karnali	34	34	KA-0-0-23
706	Bhyagute Khola	3	Karnali	26	26	KA-3-0-36

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
707	Bichchhya Khola	3	Karnali	182	182	KA-8-0-01
708	Biurani Khola	3	Karnali	21	21	KA-1-0-34
709	Bota Khola	2	Karnali	47	47	KA-0-0-17
710	Bumcha Khola	3	Karnali	24	24	KA-4-0-09
711	Bumuchhiya Khola	3	Karnali	219	219	KA-2-0-01
712	Bungad Khola	2	Karnali	35	35	KA-0-0-22
713	Burunge Khola	3	Karnali	69	69	KA-1-0-19
714	Byas Gad	4	Karnali	33	33	KA-1-1-11
715	Chaira Khola	3	Karnali	235	235	KA-3-0-05
716	Chama Gad	3	Karnali	63	63	KA-3-0-20
717	Changpola Khola	4	Karnali	30	30	KA-4-1-24
718	Chaudhabis Khola	4	Karnali	490	490	KA-5-2-01
719	Chauratha Khola	3	Karnali	27	27	KA-6-0-09
720	Chhal Gad	4	Karnali	58	58	KA-1-1-09
721	Chhala Khola	4	Karnali	26	26	KA-2-1-05
722	Chham Khola	4	Karnali	90	90	KA-4-2-03
723	Chhamghat Khola	3	Karnali	273	273	KA-6-0-01
724	Chhimdi Khola	3	Karnali	143	143	KA-8-0-02
725	Chhinchu Khola	3	Karnali	117	117	KA-1-0-07
726	Chhu Khola	4	Karnali	24	24	KA-4-1-25
727	Chhyalonba Khola	4	Karnali	26	26	KA-2-2-12
728	Chinggad Khola	3	Karnali	251	251	KA-1-0-01
729	Tusari Gad	4	Karnali	39	39	KA-3-1-16
730	Chippe Khola	4	Karnali	38	38	KA-3-1-17
731	Chu Gad	4	Karnali	69	69	KA-1-1-08
732	Chuti Gad	2	Karnali	38	38	KA-0-0-19
733	Chyamni Khola	3	Karnali	131	131	KA-4-0-01
734	Chyaune Gad	3	Karnali	23	23	KA-8-0-06
735	Daha Gad	4	Karnali	258	258	KA-1-4-01
736	Daine Khola	4	Karnali	38	38	KA-5-1-05
737	Darne Khola	4	Karnali	43	43	KA-1-2-07
738	Daukhar Khola	3	Karnali	23	23	KA-3-0-38
739	Deuta Khola	4	Karnali	41	41	KA-1-2-08
740	Dhakpal Khola	4	Karnali	22	22	KA-4-1-27
741	Khado Nadi	1	-	162	162	S14-0-00-11

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
742	Kisni Khola	1	-	104	104	S03-0-00-24
743	Dikhuwa Khola	3	Koshi	58	58	KO-0-3-02
744	Deku Khola	3	Koshi	34	34	KO-4-0-11
745	Waksu Khola	2	Koshi	77	77	KO-0-0-09
746	Rasuwa Khola	2	Koshi	120	120	KO-0-0-03
747	Yangri Khola	3	Koshi	118	118	KO-6-0-03
748	Chirkhuwa Khola	3	Koshi	75	75	KO-1-0-16
749	Giddhe Khola	4	Koshi	30	30	KO-1-2-05
750	Ghatte Khola	3	Koshi	23	23	KO-0-4-06
751	Ghatte Khola	2	Koshi	88	88	KO-0-0-06
752	Golang Khola	3	Koshi	32	32	KO-0-4-04
753	Gideri Khola	2	Koshi	23	23	KO-0-0-23
754	Gongar Khola	3	Koshi	23	23	KO-3-0-22
755	Inkhu Khola	3	Koshi	305	305	KO-4-0-04
756	Behere Khola	4	Koshi	52	52	KO-1-1-04
757	Handi Khola	4	Koshi	48	48	KO-2-1-04
758	Tawa Khola	3	Koshi	59	59	KO-0-3-01
759	Mekhu Khola	3	Koshi	24	24	KO-4-0-17
760	Bhuse Khola	3	Koshi	42	42	KO-5-0-02
761	Waphal Khola	3	Koshi	25	25	KO-0-4-05
762	Patle Khola	3	Koshi	38	38	KO-2-0-17
763	Kewa Khola	3	Koshi	35	35	KO-1-0-21
764	Cha Khola	3	Koshi	82	82	KO-6-0-05
765	Perung Khola	3	Koshi	25	25	KO-7-0-09
766	Yangkhuwa Khola	3	Koshi	123	123	KO-1-0-09
767	Marbu Khola	3	Koshi	29	29	KO-7-0-07
768	Khakuwa Khola	4	Koshi	24	24	KO-1-2-07
769	Khakuwa Khola	3	Koshi	40	40	KO-1-0-20
770	Nibhu Khola	3	Koshi	178	178	KO-2-0-06
771	Tawa Khola	4	Koshi	113	113	KO-2-1-02
772	Teliya Khola	3	Koshi	78	78	KO-2-0-11
773	Elung Khola	3	Koshi	24	24	KO-0-2-03
774	Lumding Khola	3	Koshi	95	95	KO-4-0-06
775	Ranjor Khola	3	Koshi	37	37	KO-3-0-15
776	Jhiku Khola	2	Koshi	140	140	KO-0-0-02
777	Nawa Khola	3	Koshi	204	204	KO-2-0-04
778	Duwar Khola	3	Koshi	31	31	KO-8-0-07
779	Selang Khola	4	Koshi	22	22	KO-5-1-07

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
780	Bakang Khola	3	Koshi	94	94	KO-1-0-11
781	Amji Khola	4	Koshi	36	36	KO-2-1-05
782	Pangma Khola	4	Koshi	55	55	KO-1-2-03
783	Kaku Khola	3	Koshi	47	47	KO-4-0-08
784	Phakuwa Khola	3	Koshi	26	26	KO-1-0-22
785	Menthuma Khola	3	Koshi	25	25	KO-2-0-25
786	Luluwa Khola	2	Koshi	23	23	KO-0-0-26
787	Wachinle Khola	4	Koshi	27	27	KO-1-1-07
788	Palung Khola	4	Koshi	203	203	KO-2-3-01
789	Jum Khola	3	Koshi	24	24	KO-3-0-01
790	Mahadev Khola	3	Koshi	35	35	KO-3-0-16
791	Mahadev Khola	3	Koshi	22	22	KO-4-0-18
792	Khoranga Khola	3	Koshi	160	160	KO-2-0-08
793	Rakuli Khola	2	Koshi	22	22	KO-0-0-29
794	Baramchi Khola	4	Koshi	33	33	KO-5-1-04
795	Lambu Khola	3	Koshi	162	162	KO-2-0-07
796	Laguwa Khola	3	Koshi	23	23	KO-1-0-24
797	Kusuwa Khola	4	Koshi	28	28	KO-1-2-06
798	Hadi Khola	3	Koshi	51	51	KO-6-0-06
799	Hadi Khola	3	Koshi	28	28	KO-5-0-05
800	-	3	Koshi	47	47	KO-4-0-07
801	Imja Khola	3	Koshi	375	375	KO-4-0-03
802	Tauthali Khola	3	Koshi	30	30	KO-5-0-04
803	-	3	Koshi	34	34	KO-5-0-03
804	-	4	Koshi	22	22	KO-4-1-05
805	-	4	Koshi	20	20	KO-2-3-04
806	Sailung Khola	3	Koshi	46	46	KO-0-4-02
807	Khari Khola	3	Koshi	24	24	KO-4-0-16
808	Bhyakur Khola	3	Koshi	22	22	KO-0-1-05
809	Rawa Khola	3	Koshi	403	403	KO-4-0-02
810	Chyadu Khola	3	Koshi	67	67	KO-3-0-10
811	Kokaha Khola	2	Koshi	44	44	KO-0-0-15
812	Khahare Khola	4	Koshi	26	26	KO-4-2-05
813	Andheri Khola	3	Koshi	33	33	KO-2-0-20
814	Andheri Khola	3	Koshi	31	31	KO-2-0-22
815	Punyamati Khola	3	Koshi	64	64	KO-0-1-01
816	Mahuli Nadi	2	Koshi	84	84	KO-0-0-07
817	Bhatauli Khola	3	Koshi	101	101	KO-3-0-08

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
818	Nupchu Khola	4	Koshi	41	41	KO-2-2-06
819	Dadi Khola	3	Koshi	27	27	KO-5-0-06
820	Singati Khola	3	Koshi	232	232	KO-3-0-05
821	Makhuwa Khola	2	Koshi	23	23	KO-0-0-24
822	Sisa Khola	4	Koshi	98	98	KO-4-2-02
823	Maiwa Khola	3	Koshi	197	197	KO-2-0-05
824	Ikhuwa Khola	3	Koshi	165	165	KO-1-0-08
825	Dudu Khola	3	Koshi	24	24	KO-4-0-15
826	Mendolung Khola	3	Koshi	29	29	KO-2-0-24
827	Akhuwa Khola	4	Koshi	89	89	KO-1-1-02
828	Singjengma Khola	3	Koshi	34	34	KO-2-0-19
829	Ekhuwa Khola	2	Koshi	106	106	KO-0-0-05
830	Gumu Khola	3	Koshi	39	39	KO-3-0-14
831	Chharuwa Khola	3	Koshi	66	66	KO-2-0-13
832	Chhyatungdinga Glacier	4	Koshi	30	30	KO-2-2-07
833	Lodir Khola	4	Koshi	31	31	KO-4-2-04
834	Tangkhuwa Khola	3	Koshi	73	73	KO-2-0-12
835	Baruwa Khola	3	Koshi	81	81	KO-8-0-01
836	Phunguwa Khola	3	Koshi	20	20	KO-2-0-31
837	Bandijor Khola	2	Koshi	23	23	KO-0-0-25
838	Charange Khola	3	Koshi	140	140	KO-3-0-07
839	Sorung Khola	2	Koshi	45	45	KO-0-0-14
840	Mangmaya Khola	3	Koshi	85	85	KO-1-0-13
841	Thakpa Khola	3	Koshi	31	31	KO-2-0-21
842	Raghuwa Khola	3	Koshi	39	39	KO-2-0-16
843	Jarke Khola	3	Koshi	22	22	KO-6-0-09
844	Sailung Khola	3	Koshi	22	22	KO-7-0-14
845	Tyau Khola	2	Koshi	23	23	KO-0-0-28
846	Irkhua Khola	3	Koshi	206	206	KO-1-0-06
847	Leksuwa Khola	3	Koshi	80	80	KO-1-0-15
848	Melamchi Khola	3	Koshi	324	324	KO-6-0-01
849	Niguli Khola	2	Koshi	21	21	KO-0-0-30
850	Hingkuwa Khola	4	Koshi	29	29	KO-1-1-05
851	Buku Khola	3	Koshi	71	71	KO-7-0-03
852	Phawa Khola	4	Koshi	109	109	KO-2-1-03
853	Phawa Khola	4	Koshi	28	28	KO-2-1-07
854	Gopi Khola	3	Koshi	54	54	KO-3-0-11

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
855	Gopi Khola	2	Koshi	25	25	KO-0-0-21
856	Dhad Khola	3	Koshi	35	35	KO-6-0-08
857	Tuwa Khola	2	Koshi	63	63	KO-0-0-10
858	Silkhu Khola	3	Koshi	88	88	KO-7-0-02
859	Chhujung Khola	3	Koshi	237	237	KO-1-0-04
860	Lama Khola	4	Koshi	49	49	KO-8-0-02
861	Nupche Khola	3	Koshi	109	109	KO-7-0-01
862	Rangkula Khola	2	Koshi	38	38	KO-0-0-16
863	Dapcha Khola	3	Koshi	37	37	KO-0-1-04
864	Kang Khola	3	Koshi	35	35	KO-8-0-04
865	Sera Khola	4	Koshi	28	28	KO-1-1-06
866	Sokhu Khola	2	Koshi	51	51	KO-0-0-12
867	Lapche Khola	3	Koshi	190	190	KO-3-0-02
868	Laiku Khola	2	Koshi	80	80	KO-0-0-08
869	Siwa Khola	4	Koshi	145	145	KO-2-3-02
870	Kubhinde Khola	4	Koshi	32	32	KO-5-1-05
871	Yaksuwa Khola	4	Koshi	36	36	KO-1-2-04
872	Yambling Khola	4	Koshi	25	25	KO-5-1-06
873	Sursing Khola	3	Koshi	56	56	KO-1-0-19
874	Dudhkund Khola	3	Koshi	114	114	KO-4-2-01
875	Kali Khola	3	Koshi	32	32	KO-8-0-06
876	Langkhuwa Khola	4	Koshi	68	68	KO-1-2-02
877	Thado Khola	4	Koshi	25	25	KO-4-2-06
878	Junbesi Khola	4	Koshi	93	93	KO-4-2-03
879	Piluwa Khola	3	Koshi	315	315	KO-1-0-03
880	Banauti Khola	3	Koshi	24	24	KO-7-0-11
881	Lowa Khola	4	Koshi	28	28	KO-2-3-03
882	Bitijor Khola	2	Koshi	46	46	KO-0-0-13
883	Ladku Khola	3	Koshi	44	44	KO-0-1-03
884	Larke Khola	3	Koshi	117	117	KO-6-0-04
885	Siswa Khola	3	Koshi	20	20	KO-0-0-32
886	Tilpung Khola	3	Koshi	27	27	KO-3-0-20
887	Jhyaku Khola	3	Koshi	35	35	KO-3-0-17
888	Siktell Khola	4	Koshi	71	71	KO-1-1-03
889	Saraswati Khola	3	Koshi	41	41	KO-8-0-03
890	Ramdang Glacier	4	Koshi	42	42	KO-2-2-05
891	Ramdu Khola	3	Koshi	28	28	KO-4-0-12
892	Apsuwa Khola	3	Koshi	219	219	KO-1-0-05

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
893	Bahadur Khola	2	Koshi	57	57	KO-0-0-11
894	Kawa Khola	4	Koshi	103	103	KO-1-1-01
895	Rate Khola	4	Koshi	25	25	KO-2-2-08
896	Adheri Khola	2	Koshi	23	23	KO-0-0-27
897	Lhonak Glacier	4	Koshi	61	61	KO-2-2-02
898	Hangdak Khola	3	Koshi	24	24	KO-1-0-23
899	Patnali Khola	2	Koshi	26	26	KO-0-0-19
900	Nuwa Khola	3	Koshi	30	30	KO-2-0-23
901	Sepli Khola	3	Koshi	61	61	KO-0-2-01
902	Leuti Khola	3	Koshi	49	49	KO-2-0-14
903	Phalate Khola	3	Koshi	45	45	KO-7-0-05
904	Chhaude Khola	3	Koshi	24	24	KO-8-0-09
905	Kasuwa Khola	3	Koshi	111	111	KO-1-0-10
906	Khani Khola	3	Koshi	80	80	KO-0-4-01
907	Bhuwa Khola	4	Koshi	25	25	KO-4-1-03
908	Sejangma Khola	3	Koshi	24	24	KO-2-0-27
909	Pokali Khola	3	Koshi	29	29	KO-7-0-08
910	Pheda Khola	3	Koshi	34	34	KO-0-4-03
911	Tengwa Khola	3	Koshi	23	23	KO-2-0-28
912	Barun Nadi	3	Koshi	470	470	KO-1-0-01
913	Koya Khola	3	Koshi	116	116	KO-2-0-10
914	Leguwa Khola	3	Koshi	90	90	KO-1-0-12
915	Lagen Khola	4	Koshi	82	82	KO-5-1-03
916	Dingsamba Khola	3	Koshi	34	34	KO-2-0-18
917	Tamewa Khola	3	Koshi	20	20	KO-2-0-30
918	Thotane Khola	3	Koshi	137	137	KO-4-0-05
919	Chulepu Khola	3	Koshi	46	46	KO-7-0-04
920	Bhalu Khola	3	Koshi	20	20	KO-0-4-07
921	Simbua Khola	3	Koshi	269	269	KO-2-0-03
922	Pauda Khola	2	Koshi	30	30	KO-0-0-17
923	Kyasar Khola	3	Koshi	45	45	KO-4-0-10
924	Kinja Khola	3	Koshi	32	32	KO-7-0-06
925	Chepuwa Khola	3	Koshi	22	22	KO-1-0-25
926	Phedi Khola	3	Koshi	23	23	KO-2-0-29
927	Kaguwa Khola	3	Koshi	22	22	KO-1-0-26
928	Sawa Khola	2	Koshi	182	182	KO-0-0-01
929	Bhugdeu Khola	3	Koshi	20	20	KO-0-1-06
930	Lohale Khola	3	Koshi	29	29	KO-8-0-08

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
931	Kangkhu Khola	4	Koshi	38	38	KO-4-1-02
932	Iwa Khola	4	Koshi	265	265	KO-2-1-01
933	Sowa Khola	3	Koshi	127	127	KO-2-0-09
934	Jhyari Khola	3	Koshi	120	120	KO-6-0-02
935	Bebbar Khola	3	Koshi	46	46	KO-0-1-02
936	Pangkhu Khola	3	Koshi	25	25	KO-4-0-13
937	Sapsu Khola	3	Koshi	24	24	KO-7-0-12
938	Dhamile Khola	2	Koshi	29	29	KO-0-0-18
939	Nyamyasa Masai Khola	4	Koshi	121	121	KO-5-1-01
940	Ghyang Khola	3	Koshi	33	33	KO-3-0-19
941	Hewa Khola	4	Koshi	149	149	KO-1-2-01
942	Hewa Khola	3	Koshi	370	370	KO-2-0-02
943	Baeku Khola	2	Koshi	21	21	KO-0-0-31
944	Buwa Khola	2	Koshi	110	110	KO-0-0-04
945	Muga Khola	3	Koshi	73	73	KO-1-0-17
946	Sobuwa Khola	3	Koshi	43	43	KO-2-0-15
947	Larkhu Khola	3	Koshi	23	23	KO-7-0-13
948	Budum Khola	4	Koshi	50	50	KO-4-1-01
949	Rolwaling Khola	3	Koshi	306	306	KO-3-0-04
950	Yangma Khola	3	Koshi	417	417	KO-2-0-01
951	Bhotekoshi Nadi	3	Koshi	368	368	KO-5-0-01
952	Bhotekoshi Nadi	3	Koshi	428	428	KO-4-0-01
953	Nyasem Khola	4	Koshi	87	87	KO-5-1-02
954	Kusumlanga Khola	3	Koshi	24	24	KO-4-0-14
955	Hangraha Khola	3	Koshi	59	59	KO-1-0-18
956	Salle Khola	2	Koshi	26	26	KO-0-0-20
957	Sipring Khola	3	Koshi	45	45	KO-3-0-12
958	Induwa Khola	3	Koshi	82	82	KO-1-0-14
959	Bejo Khola	4	Koshi	24	24	KO-4-1-04
960	Sisne Khola	3	Koshi	25	25	KO-2-0-26
961	Khaksewa Khola	4	Koshi	31	31	KO-2-1-06
962	Poktin Khola	3	Koshi	23	23	KO-0-2-04
963	Kharuwa Khola	3	Koshi	24	24	KO-0-3-04
964	Sindhu Khola	3	Koshi	51	51	KO-6-0-07
965	Chokti Khola	3	Koshi	25	25	KO-7-0-10
966	Miya Khola	3	Koshi	50	50	KO-0-3-03
967	Malapu Khola	4	Koshi	21	21	KO-1-1-08

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
968	Solung Khola	3	Koshi	31	31	KO-0-2-02
969	Tinekhu Khola	3	Koshi	27	27	KO-3-0-21
970	Dolti Khola	3	Koshi	44	44	KO-3-0-13
971	Phundri Khola	3	Koshi	22	22	KO-7-0-15
972	Milti Khola	3	Koshi	69	69	KO-3-0-09
973	Rauje Khola	3	Koshi	46	46	KO-4-0-09
974	Isuwa Khola	3	Koshi	188	188	KO-1-0-07
975	Khare Khola	3	Koshi	230	230	KO-3-0-06
976	Khimti Khola	3	Koshi	445	445	KO-3-0-03
977	Chhatang Khola	2	Koshi	24	24	KO-0-0-22
978	Yamtari Khola	4	Koshi	55	55	KO-2-2-03
979	Sangkhuwa Khola	3	Koshi	350	350	KO-1-0-02
980	Kanchanjunga Glacier	4	Koshi	160	160	KO-2-2-01
981	Kumbhakarna (jano) Glacier	4	Koshi	49	49	KO-2-2-04
982	Sukajor Khola	3	Koshi	33	33	KO-3-0-18
983	Devijor Khola	3	Koshi	32	32	KO-8-0-05
984	Mutahawa Nala	2	-	57	57	S47-0-20-02
985	-	2	-	22	22	S22-0-02-06
986	Tilar Nadi	2	-	106	106	S47-0-20-01
987	Chapani Khola	2	-	33	33	S27-0-18-02
988	Dayani Khola	2	-	21	21	S27-0-18-03
989	Dengraha Nala	2	-	54	54	S27-0-18-01
990	Bakaiya Nadi	2	-	322	322	S28-0-03-01
991	Bhakuwa Nadi	2	-	103	103	S28-0-03-02
992	Bhamara Khola	2	-	47	47	S28-0-03-06
993	Dhansar Nadi	2	-	90	90	S28-0-03-03
994	Kamdai Nadi	2	-	73	73	S28-0-03-04
995	Lal Nadi	2	-	57	57	S28-0-03-05
996	Bhaluwa Khola	2	-	36	36	S08-0-15-02
997	Judi Khola	2	-	27	27	S08-0-15-05
998	Judi Khola	2	-	59	59	S08-0-15-05
999	Kesaula Khola	2	-	32	32	S08-0-15-03
1000	Sukuna Khola	2	-	27	27	S08-0-15-04
1001	Chhachang Khola	3	Mahakali	68	68	MA-0-2-02
1002	Chhetiganga Gad	3	Mahakali	158	158	MA-1-0-03

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1003	Chhumchhum Gad	3	Mahakali	77	77	MA-1-0-04
1004	Dhik Gad	3	Mahakali	60	60	MA-1-0-07
1005	Dhole Khola	3	Mahakali	26	26	MA-2-0-06
1006	Dongkang Khola	3	Mahakali	51	51	MA-0-2-03
1007	Doti Gad	3	Mahakali	324	324	MA-2-0-01
1008	Gandi Gad	3	Mahakali	55	55	MA-1-0-09
1009	Gangkhet Khola	3	Mahakali	35	35	MA-0-1-05
1010	Garma Gad	2	Mahakali	81	81	MA-0-0-05
1011	Ghatte Khola	3	Mahakali	20	20	MA-0-2-04
1012	Gokule Gad	3	Mahakali	23	23	MA-1-0-15
1013	Gola Gad	3	Mahakali	23	23	MA-1-0-16
1014	Agadi Gad	3	Mahakali	46	46	MA-2-0-02
1015	Jamadi Gad	3	Mahakali	232	232	MA-1-0-01
1016	Agari Gad	3	Mahakali	20	20	MA-1-0-17
1017	Jogbuda Nadi	2	Mahakali	26	26	MA-0-0-01
1018	Kaksyali Gad	3	Mahakali	37	37	MA-2-0-03
1019	Kala Gad	2	Mahakali	46	46	MA-0-0-11
1020	Kalena Khola	3	Mahakali	29	29	MA-0-1-06
1021	Kulau Khola	2	Mahakali	21	21	MA-0-0-22
1022	Kuledi Khola	3	Mahakali	42	42	MA-0-1-04
1023	Lali Gad	2	Mahakali	23	23	MA-0-0-20
1024	Lasku Khola	2	Mahakali	40	40	MA-0-0-13
1025	Lilinti Khola	2	Mahakali	22	22	MA-0-0-21
1026	Makari Gad	3	Mahakali	44	44	MA-1-0-10
1027	Matela Gad	2	Mahakali	24	24	MA-0-0-19
1028	Nampa Khola	3	Mahakali	136	136	MA-0-2-01
1029	Nau Gad	3	Mahakali	209	209	MA-1-0-02
1030	Nijang Gad	2	Mahakali	27	27	MA-0-0-15
1031	Nilgad Gad	2	Mahakali	46	46	MA-0-0-12
1032	Nwa Gad	3	Mahakali	70	70	MA-1-0-05
1033	Api Khola	2	Mahakali	53	53	MA-0-0-08
1034	Pangkha Gad	2	Mahakali	27	27	MA-0-0-16
1035	Parmoli Gad	2	Mahakali	69	69	MA-0-0-06
1036	Pathang Khola	2	Mahakali	121	121	MA-0-0-02
1037	Puntura Khola	3	Mahakali	126	126	MA-0-1-01
1038	Ratyadi Gad	3	Mahakali	23	23	MA-2-0-08
1039	Rithe Gad	3	Mahakali	25	25	MA-1-0-13

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1040	Rokhab Gad	3	Mahakali	57	57	MA-1-0-08
1041	Rugru Gad	3	Mahakali	69	69	MA-1-0-06
1042	Runighat Gad	3	Mahakali	32	32	MA-2-0-05
1043	Rupali Gad	2	Mahakali	47	47	MA-0-0-10
1044	Sadani Khola	2	Mahakali	59	59	MA-0-0-07
1045	Shyadi Gad	3	Mahakali	37	37	MA-2-0-04
1046	Sirse Gad	2	Mahakali	86	86	MA-0-0-04
1047	Sun Khola	3	Mahakali	48	48	MA-0-1-02
1048	Tampa Khola	2	Mahakali	89	89	MA-0-0-03
1049	Bakot Gad	3	Mahakali	26	26	MA-2-0-07
1050	Thadgadi Gad	3	Mahakali	25	25	MA-1-0-12
1051	Thadiul Gad	3	Mahakali	23	23	MA-1-0-14
1052	Thali Gad	2	Mahakali	37	37	MA-0-0-14
1053	Baku Gad	2	Mahakali	24	24	MA-0-0-18
1054	Tilkeni Khola	2	Mahakali	23	23	MA-0-0-17
1055	Baniyal Khola	3	Mahakali	45	45	MA-0-1-03
1056	Bhabiya Gad	3	Mahakali	37	37	MA-1-0-11
1057	Bhartola Gad	2	Mahakali	50	50	MA-0-0-09
1058	Maraha Nadi	1	-	162	162	S24-0-00-10
1059	Achhariya Nala	2	-	49	49	S52-0-05-05
1060	Dundawa Khola	2	-	60	60	S52-0-05-04
1061	Jethan Nala	2	-	93	93	S52-0-05-02
1062	Kareli Khola	2	-	22	22	S52-0-05-06
1063	Kiran Nala	2	-	181	181	S52-0-05-01
1064	Reu Khola	2	-	77	77	S52-0-05-03
1065	Marthi Nadi	1	-	113	113	S48-0-00-23
1066	Badojhoda Khola	2	Mechi	100	100	ME-I(MN)-0-0-03
1067	Paliya Khola	2	Mechi	39	39	ME-I(MN)-0-0-05
1068	Siddhi Khola	2	Mechi	78	78	ME-I(MN)-0-0-04
1069	Deuniya Khola	2	Mechi	147	147	ME-I(MN)-0-0-02
1070	Hadiya Khola	2	Mechi	228	228	ME-I(MN)-0-0-01
1071	Arbarwa Nala	3	-	54	54	S53-1-01-03
1072	Bauniya Nala	3	-	50	50	S53-1-01-05
1073	Charaila Khola	3	-	43	43	S53-1-01-06
1074	Chori Khola	3	-	58	58	S53-1-01-02
1075	Doda Nadi	3	-	130	130	S53-1-02-01
1076	Ghuraha Nala	2	-	254	254	S53-1-00-01
1077	Godavari Nadi	2	-	74	74	S53-1-00-03

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1078	Kailali Nala	2	-	38	38	S53-1-00-07
1079	Kala Khola	3	-	129	129	S53-1-03-01
1080	Kandri Nadi	3	-	95	95	S53-1-02-02
1081	Karha Nadi	2	-	211	211	S53-1-01-01
1082	Kulariya Nala	3	-	53	53	S53-1-01-04
1083	Manahara Nadi	2	-	46	46	S53-1-00-04
1084	Roda Khola	4	-	43	43	S53-1-01-07
1085	Sharma Nadi	2	-	236	236	S53-1-00-02
1086	Shiva Ganga Nadi	3	-	53	53	S53-1-02-03
1087	Shiva Ganga Nadi	3	-	116	116	S53-1-02-03
1088	Sukuti Nala	2	-	23	23	S53-1-00-09
1089	Suni Khola	2	-	30	30	S53-1-00-08
1090	Surmi Nala	2	-	41	41	S53-1-00-05
1091	Tengna Nadi	3	-	24	24	S53-1-02-04
1092	Tudela Nadi	2	-	41	41	S53-1-00-06
1093	Munahara Nadi	1	-	85	85	S19-0-00-26
1094	Odar Khola	1	-	26	26	S39-0-00-34
1095	Pasaha Nadi	1	-	285	285	S31-0-00-01
1096	Angkuse Nadi	2	-	255	255	S23-0-07-01
1097	Badahari Khola	2	-	39	39	S23-0-07-02
1098	Chanju Khola	2	-	34	34	S05-0-14-02
1099	Mawa Khola	2	-	106	106	S05-0-14-01
1100	Rohini Nadi	1	-	218	218	S44-0-00-06
1101	Satbudri Nala	1	-	78	78	S42-0-00-30
1102	Shikaribas Khola	1	-	80	80	S38-0-00-28
1103	Sikta Nadi	1	-	246	246	S36-0-00-03
1104	Singgiya Nadi	1	-	124	124	S09-0-00-18
1105	Sirsiya Nadi	1	-	116	116	S33-0-00-21
1106	Dattakicha Khola	2	-	77	77	S12-0-11-02
1107	Kakro Nala	2	-	150	150	S12-0-11-01
1108	Serha Khola	2	-	32	32	S12-0-11-03
1109	Surai Khola	1	-	191	191	S50-0-00-08
1110	Thute Khola	1	-	60	60	S40-0-00-33
1111	Bhedaha Nadi	2	-	74	74	S34-0-09-02
1112	Jamuniya Nadi	2	-	167	167	S34-0-09-01
1113	Phanti Khola	2	-	58	58	S34-0-09-03
1114	Tiluga Nadi	1	-	122	122	S13-0-00-19

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1115	Dobhan Khola	2	Tinau	178	178	TI-I(KA)-0-0-01
1116	Hulandi Khola	2	Tinau	90	90	TI-I(KA)-0-0-03
1117	Inguriya Khola	3	Tinau	112	112	TI-I(KA)-0-1-01
1118	Jhumsa Khola	2	Tinau	96	96	TI-I(KA)-0-0-02
1119	Kanchan Nadi	3	Tinau	99	99	TI-I(KA)-0-1-02
1120	Siyari Nadi	3	Tinau	34	34	TI-I(KA)-0-1-03
1121	Sukahi Nadi	3	Tinau	32	32	TI-I(KA)-0-1-04
1122	Tapaha Khola	3	Tinau	30	30	TI-I(KA)-0-1-05
1123	Tiyar Nadi	1	-	260	260	S30-0-00-02
1124	Trishula Nadi	1	-	116	116	S20-0-00-22
1125	Uriya Nadi	1	-	147	147	S37-0-00-14
1126	Gam Khola	4	West Rapti	32	32	WR-I(KA)-1-1-06
1127	Bane Khola	3	West Rapti	30	30	WR-I(KA)-1-0-10
1128	Bangsiri Khola	3	West Rapti	21	21	WR-I(KA)-2-0-08
1129	Syano Khola	2	West Rapti	116	116	WR-I(KA)-0-0-07
1130	Bhaisahi Khola	2	West Rapti	41	41	WR-I(KA)-0-0-16
1131	Bhaukahawa Khola	2	West Rapti	30	30	WR-I(KA)-0-0-20
1132	Bhiting Khola	3	West Rapti	25	25	WR-I(KA)-1-0-11
1133	Bojyang Khola	4	West Rapti	84	84	WR-I(KA)-1-1-03
1134	Chhap Khola	3	West Rapti	150	150	WR-I(KA)-2-0-02
1135	Chhirling Khola	3	West Rapti	40	40	WR-I(KA)-2-0-05
1136	Chiura Khola	3	West Rapti	197	197	WR-I(KA)-1-0-03
1137	Chunbang Khola	3	West Rapti	93	93	WR-I(KA)-1-0-06
1138	Dangdung Khola	3	West Rapti	123	123	WR-I(KA)-1-0-04
1139	Darbhan Khola	2	West Rapti	20	20	WR-I(KA)-0-0-28
1140	Dhangsi Khola	3	West Rapti	113	113	WR-I(KA)-1-0-05
1141	Duduwa Khola	2	West Rapti	186	186	WR-I(KA)-0-0-03
1142	Gabar Khola	2	West Rapti	23	23	WR-I(KA)-0-0-26
1143	Gaja Khola	4	West Rapti	66	66	WR-I(KA)-1-1-04
1144	Ganaha Khola	2	West Rapti	125	125	WR-I(KA)-0-0-06
1145	Gartang Khola	3	West Rapti	84	84	WR-I(KA)-2-0-03
1146	Ghor Khola	3	West Rapti	45	45	WR-I(KA)-1-0-08
1147	Ghusbang Khola	4	West Rapti	127	127	WR-I(KA)-1-1-02
1148	Gurung Khola	2	West Rapti	43	43	WR-I(KA)-0-0-15
1149	Chudari Khola	3	West Rapti	26	26	WR-I(KA)-2-0-07
1150	Hungri Khola	3	West Rapti	43	43	WR-I(KA)-1-0-09
1151	Jhijhari Khola	2	West Rapti	224	224	WR-I(KA)-0-0-02

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1152	Jhuri Khola	2	West Rapti	28	28	WR-I(KA)-0-0-23
1153	Jumri Khola	3	West Rapti	42	42	WR-I(KA)-2-0-04
1154	Kanera Khola	3	West Rapti	20	20	WR-I(KA)-2-0-09
1155	Khairi Khola	2	West Rapti	66	66	WR-I(KA)-0-0-11
1156	Khar Khola	3	West Rapti	31	31	WR-I(KA)-2-0-06
1157	Kharanga Khola	2	West Rapti	30	30	WR-I(KA)-0-0-21
1158	Khoche Khola	2	West Rapti	30	30	WR-I(KA)-0-0-19
1159	Kochhap Khola	3	West Rapti	73	73	WR-I(KA)-1-0-07
1160	Lomarari Khola	2	West Rapti	47	47	WR-I(KA)-0-0-13
1161	Lumba Khola	2	West Rapti	22	22	WR-I(KA)-0-0-27
1162	Lung Khola	3	West Rapti	218	218	WR-I(KA)-2-0-01
1163	Mahatini Khola	2	West Rapti	43	43	WR-I(KA)-0-0-14
1164	Moranga Khola	2	West Rapti	69	69	WR-I(KA)-0-0-10
1165	Muguwa Khola	2	West Rapti	74	74	WR-I(KA)-0-0-09
1166	Oli Khola	3	West Rapti	24	24	WR-I(KA)-1-0-12
1167	Phagam Khola	4	West Rapti	137	137	WR-I(KA)-1-1-01
1168	Rangle Khola	2	West Rapti	54	54	WR-I(KA)-0-0-12
1169	Rangsing Khola	2	West Rapti	164	164	WR-I(KA)-0-0-04
1170	Rihar Khola	2	West Rapti	29	29	WR-I(KA)-0-0-22
1171	Agrang Khola	3	West Rapti	257	257	WR-I(KA)-1-0-01
1172	Sibang Khola	3	West Rapti	205	205	WR-I(KA)-1-0-02
1173	Sikrahawa Khola	2	West Rapti	23	23	WR-I(KA)-0-0-25
1174	Simalkota Khola	2	West Rapti	38	38	WR-I(KA)-0-0-17
1175	Sit Khola	2	West Rapti	136	136	WR-I(KA)-0-0-05
1176	Sunpathari Khola	2	West Rapti	25	25	WR-I(KA)-0-0-24
1177	Sukhar Khola	2	West Rapti	37	37	WR-I(KA)-0-0-18
1178	Arjun Khola	2	West Rapti	233	233	WR-I(KA)-0-0-01
1179	Khabri Khola	2	West Rapti	81	81	WR-I(KA)-0-0-08
1180	Judhung Khola	4	West Rapti	59	59	WR-I(KA)-1-1-05

Annex 2: Rivers of Level-2 to Level-4 in the Karnali Basin

SN	Level 2 (Area, km²)	Level 3 (Area, km²)	Level 4 (Area, km²)
1			
2	Bheri Nadi (13626)		
3		Thuli Bheri Nadi (4439)	
4			Bharbung Khola (1863)
5			Suli Gad (959)
6			Tarap Khola (584)
7			Rup Gad Khola (162)
8			Alle Khola (111)
9			Jairi Khola (96)
10			Yalakot Khola (71)
11			Chu Gad (69)
12			Chhal Gad (58)
13			Khati Khola (55)
14			Byas Gad (33)
15			Phulching Khola (28)
16			Galli Gad (23)
17		Sani Bheri Nadi (2725)	
18			Pelma Khola (996)
19			Uttar Ganga Nadi (486)
20			Rukum Gad (289)
21			Sisne Khola (243)
22			Muglu Khola (170)
23			Puma Khola (55)
24			Darne Khola (43)
25			Deuta Khola (41)
26			Bargaun Khola (39)
27			Tubang Khola (39)
28			Dumai Khola (25)
29		Chhera Khola (1016)	
30			Suwa Gad (413)
31			Saru Khola (318)
32			Bhius Khola (117)
33			Salma Khola (76)
34		Nalsyagu Khola (680)	
35			Daha Gad (258)
36			Ranga Gad (235)
37			Jhumre Khola (60)
38			Sepu Khola (46)
39		Jagdula Khola (514)	
40			Kanjirowa Khola (102)

SN	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
41			Bhitta Paduwa Khola (83)
42			Peni Palat Khola (80)
43			Tangtungge Khola (29)
44			Thuli Palat Khola (21)
45		Chinggad Khola (251)	
46		Jaldi Gad (191)	
47		Jahari Khola (186)	
48		Sot Khola (153)	
49		Banggad Khola (131)	
50		Sangrahi Khola (126)	
51		Chhinchu Khola (117)	
52		Marma Khola (113)	
53		Gochhe Khola (105)	
54		Nikas Khola (103)	
55		Taksu Khola (96)	
56		Simta Khola (94)	
57		Kuliban Khola (92)	
58		Jhupra Khola (89)	
59		Basante Khola (87)	
60		Jugai Khola (84)	
61		Nune Gad (74)	
62		Garpung Khola (71)	
63		Burunge Khola (69)	
64		Phedi Khola (59)	
65		Holu Khola (59)	
66		Gija Gad (56)	
67		Girighat Khola (51)	
68		- (46)	
69		Ghatechaur Khola (39)	
70		Khahare Khola (34)	
71		Battise Khola (31)	
72		Obang Khola (31)	
73		- (31)	
74		Telpani Khola (29)	
75		Kalpani Khola (28)	
76		Phoigar Khola (27)	
77		Tattar Gad (25)	
78		Biurani Khola (21)	
79		Lahaghat Khola (21)	
80		Kali Khola (20)	

SN	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
81	Humla Karnali Nadi (9104)		
82		Loti Karnali Nadi (1304)	
83			Take Khola (612)
84			Mimibang Khola (371)
85			Rauli Khola (104)
86			Musyang Khola (60)
87			Chhala Khola (26)
88		Chuwa Khola (1300)	
89			Luruppa Khola (292)
90			Ning Khola (239)
91			Lachama Khola (118)
92			Lare Khola (84)
93			Tumling Khola (38)
94			Ghatte Khola (36)
95			Rakabu Khola (36)
96			Talung Khola (35)
97			- (32)
98			Laregonba Khola (31)
99			Ghalje Khola (27)
100			Chhyalonba Khola (26)
101		Limi Khola (1146)	
102			Telung Khola (276)
103			Sakya Khola (151)
104			Taisolu Khola (96)
105			- (73)
106			Til Khola (49)
107			Halji Khola (31)
108			Ning Khola (29)
109		Bumuchhiya Khola (219)	
110		Kwalungwa Khola (195)	
111		Hepka Khola (163)	
112		Salli Khola (152)	
113		Galpha Gad (105)	
114		Gothi Khola (101)	
115		Tumkot Khola (66)	
116		Rip Gad (55)	
117		Phupharka Khola (54)	
118		Nehar Khola (41)	
119		Tarkesya Nadi (41)	
120		Gurgure Khola (37)	

SN	Level 2 (Area, km²)	Level 3 (Area, km²)	Level 4 (Area, km²)
121		Karanga Khola (32)	
122		Tangur Khola (32)	
123		Kudilla Khola (30)	
124		Kunwa Khola (26)	
125		Yangchu Khola (24)	
126		Puiya Khola (24)	
127		Kulla Gad (22)	
128		Limne Khola (20)	
129	West Seti Nadi (7370)		
130		Budhi Ganga Nadi (1739)	
131			Kailash Khola (278)
132			Mala Gad (121)
133			Bauli Gad (109)
134			Ikdi Gad (87)
135			Kodari Gad (68)
136			Simtari Gad (61)
137			Kasa Gad (57)
138			Barju Gad (56)
139			Thuli Ganga Nadi (54)
140			Prabhali Gad (50)
141			Sarani Gad (47)
142			Simarawa Khola (47)
143			Dogada Khola (45)
144			Tipada Gad (42)
145			Jijadi Gad (41)
146			Tusari Gad (39)
147			Chippe Khola (38)
148			Lungreli Gad (28)
149			Mana Gad (26)
150			Gairi Gad (24)
151			Madi Khola (20)
152		Kalanga Nadi (558)	
153			Sani Gad (161)
154			Sokar Gad (29)
155		Syangbang Khola (424)	
156		Ghatganga Khola (350)	
157		Salimor Khola (254)	
158		Sakayal Khola (238)	
159		Chaira Khola (235)	
160		Suni Gad (213)	
161		Bauli Gad (205)	

SN	Level 2 (Area, km²)	Level 3 (Area, km²)	Level 4 (Area, km²)
162		Sayali Gad (186)	
163		Gaddi Gad (173)	
164		Jadari Gad (157)	
165		Nuwaghari Gad (134)	
166		Dhung Gad Khola (133)	
167		Tuda Gad (112)	
168		Taru Gad (99)	
169		Talkoti Gad (82)	
170		Dogaira Gad (77)	
171		Kala Gad (73)	
172		Talkot Gad (72)	
173		Samuha Gad (68)	
174		Chama Gad (63)	
175		Thalari Gad (49)	
176		Juil Gad (48)	
177		Lachhi Gad (48)	
178		Rakse Urai Khola (47)	
179		Gala Gad (45)	
180		Dwari Gad (42)	
181		Dungri Gad (42)	
182		Lisni Gad (41)	
183		Ana Gad (41)	
184		Golma Gad (39)	
185		Godare Khola (39)	
186		Dwari Gad (37)	
187		Dil Gad (30)	
188		Gudpal Khola (30)	
189		Melti Khola (26)	
190		Bhyagute Khola (26)	
191		Koireli Gad (24)	
192		Daukhar Khola (23)	
193		Rani Gad (23)	
194		Sir Khola (23)	
195		Nilkati Khola (22)	
196	Mugu Karnali Nadi (5314)		
197		Namlang Nadi (3530)	
198			Takla Khola (355)
199			Nagong Khola (340)
200			Keheing Khola (253)
201			Tartang Khola (227)

SN	Level 2 (Area, km²)	Level 3 (Area, km²)	Level 4 (Area, km²)
202			Polte Khola (197)
203			Jhyanglung Khola (119)
204			Sumdo Khola (117)
205			Tangkya Khola (115)
206			Sulung Khola (114)
207			Korang Khola (110)
208			Musi Khola (101)
209			Ruka Khola (90)
210			Swaksa Khola (77)
211			Kanjirowa Khola (74)
212			Mait Khola (73)
213			Mukdem Khola (71)
214			Khung Khola (71)
215			Pukcheng Khola (67)
216			Sije Khola (60)
217			Tagre Khola (57)
218			Moga Khola (43)
219			Raphu Khola (41)
220			Puwe Khola (40)
221			Changpola Khola (30)
222			Chhu Khola (24)
223			Phanda Khola (24)
224			Dhakpal Khola (22)
225			Phor Khola (22)
226		Mugu Khola (766)	
227			Kogi Khola (127)
228			Talak Khola (111)
229			Chham Khola (90)
230			Kangja Khola (77)
231			Takya Khola (59)
232			Yenjam Khola (51)
233			Kogichwa Khola (46)
234			Gilang Khola (44)
235		Chyamni Khola (131)	
236		Gam Gad (125)	
237		Luma Khola (90)	
238		Shobha Khola (85)	
239		Kang Khola (58)	
240		Riusa Khola (36)	
241		Rigda Khola (33)	
242		Logu Khola (28)	

SN	Level 2 (Area, km²)	Level 3 (Area, km²)	Level 4 (Area, km²)
243		Bumcha Khola (24)	
244		Rum Khola (23)	
245		Jima Khola (22)	
246		Serog Khola (22)	
247	Tila Nadi (3320)		
248		Hima Nadi (807)	
249			Khare Khola (74)
250			Jaljala Khola (65)
251			Pathar Khola (47)
252			Lihi Khola (45)
253			Daine Khola (38)
254			Mahendra Mali Khola (31)
255			Banganga Khola (28)
256			Bau Khola (26)
257			Odi Khola (23)
258			Baj Gad (22)
259			Bare Khola (20)
260			Ghatte Khola (20)
261		Juwa Nadi (549)	
262			Chaudhabis Khola (490)
263			Ghodasain Khola (24)
264		Ruru Bangchu Khola (383)	
265		Bheri Khola (309)	
266		Juli Odar Khola (247)	
267		Gidi Khola (193)	
268		Babila Khola (68)	
269		Goru Khola (67)	
270		Jogad Khola (43)	
271		Bharta Gad (41)	
272		Bali Gad (31)	
273		Um Khola (29)	
274		Jhula Khola (29)	
275		Simla Gad (25)	
276		Badkhi Khola (22)	
277	Lohare Khola (1017)		
278		Chhamghat Khola (273)	
279		Katti Khola (155)	
280		Parajuli Khola (154)	
281		Padam Khola (64)	
282		Tani Khola (38)	

SN	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
283		Sot Khola (28)	
284		Rati Khola (27)	
285		Matela Khola (27)	
286		Chauratha Khola (27)	
287		Dwari Khola (23)	
288	Thuli Gad (890)		
289		Gadsera Gad (155)	
290		Kapadi Khola (132)	
291		Karmanas Gad (128)	
292		Kamala Nadi (41)	
293		Khairala Khola (40)	
294		Kumara Gad (39)	
295		Salle Khola (23)	
296	Kawadi Khola (818)		
297		Bichchhya Khola (182)	
298		Chhimdi Khola (143)	
299		Neti Khola (61)	
300		Titatiya Khola (55)	
301		Lepche Khola (37)	
302		Chyaune Gad (23)	
303	Orai Khola (309)		
304		Ambasa Khola (65)	
305		Jhamati Khola (52)	
306		Orai Khola (25)	
307	Khetyad Khola (299)		
308	Tipgad Khola (250)		
309	Kunda Khola (221)		
310	Ram Gad (165)		
311	Raha Gad (138)		
312	Sannido Gad (119)		
313	Khulli Khola (107)		
314	Paduka Gad (90)		
315	Juddi Khola (81)		
316	Talamera Khola (77)		
317	Koltadi Khola (73)		
318	Belkher Khola (69)		
319	Paima Khola (66)		
320	Lapha Gad (59)		
321	Satdawa Khola (55)		
322	Gumna Nadi (52)		
323	Bota Khola (47)		

SN	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
324	Phu Gad (40)		
325	Chuti Gad (38)		
326	Regil Khola (36)		
327	Phala Gad (36)		
328	Bungad Khola (35)		
329	Bhuka Khola (34)		
330	Limbu Khola (31)		
331	Lode Gad (30)		
332	Sera Khola (30)		
333	Betan Khola (29)		
334	Orai Khola (29)		
335	Phulam Khola (28)		
336	Rudi Khola (28)		
337	Bhadali Nala (26)		
338	Kara Khola (24)		
339	Thini Khola (24)		
340	Rohati Khola (23)		
341	Bade Khola (22)		
342	Syaule Khola (22)		
343	Pogade Khola (21)		
344	Dogade Khola (20)		

Annex 3: Details of sub-basins, watersheds and sub-watersheds in the Karnali Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				KA
2	Bheri Nadi (13626)			KA-1
3		Thuli Bheri Nadi (4439)		KA-1-1
4			Bharbung Khola (1863)	KA-1-1-01
5			Suli Gad (959)	KA-1-1-02
6			Tarap Khola (584)	KA-1-1-03
7			Rup Gad Khola (162)	KA-1-1-04
8			Alle Khola (111)	KA-1-1-05
9			Jairi Khola (96)	KA-1-1-06
10			Yalakot Khola (71)	KA-1-1-07
11			Chu Gad (69)	KA-1-1-08
12			Chhal Gad (58)	KA-1-1-09
13			Khati Khola (55)	KA-1-1-10
14			Byas Gad (33)	KA-1-1-11
15			Phulching Khola (28)	KA-1-1-12
16			Galli Gad (23)	KA-1-1-13
17		Sani Bheri Nadi (2725)		KA-1-2
18			Pelma Khola (996)	KA-1-2-01
19			Uttar Ganga Nadi (486)	KA-1-2-02
20			Rukum Gad (289)	KA-1-2-03
21			Sisne Khola (243)	KA-1-2-04
22			Muglu Khola (170)	KA-1-2-05
23			Puma Khola (55)	KA-1-2-06
24			Darne Khola (43)	KA-1-2-07
25			Deuta Khola (41)	KA-1-2-08
26			Bargaun Khola (39)	KA-1-2-09
27			Tubang Khola (39)	KA-1-2-10
28			Dumai Khola (25)	KA-1-2-11
29		Chhera Khola (1016)		KA-1-3
30			Suwa Gad (413)	KA-1-3-01
31			Saru Khola (318)	KA-1-3-02
32			Bhius Khola (117)	KA-1-3-03
33			Salma Khola (76)	KA-1-3-04
34		Nalsyagu Khola (680)		KA-1-4
35			Daha Gad (258)	KA-1-4-01
36			Ranga Gad (235)	KA-1-4-02

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
37			Jhumre Khola (60)	KA-1-4-03
38			Sepu Khola (46)	KA-1-4-04
39		Jagdula Khola (514)		KA-1-5
40			Kanjirowa Khola (102)	KA-1-5-01
41			Bhitta Paduwa Khola (83)	KA-1-5-02
42			Peni Palat Khola (80)	KA-1-5-03
43			Tangtungge Khola (29)	KA-1-5-04
44			Thuli Palat Khola (21)	KA-1-5-05
45			Chinggad Khola (251)	KA-1-0-01
46			Jaldi Gad (191)	KA-1-0-02
47			Jahari Khola (186)	KA-1-0-03
48			Sot Khola (153)	KA-1-0-04
49			Banggad Khola (131)	KA-1-0-05
50			Sangrahi Khola (126)	KA-1-0-06
51			Chhinchu Khola (117)	KA-1-0-07
52			Marma Khola (113)	KA-1-0-08
53			Gochhe Khola (105)	KA-1-0-09
54			Nikas Khola (103)	KA-1-0-10
55			Taksu Khola (96)	KA-1-0-11
56			Simta Khola (94)	KA-1-0-12
57			Kuliban Khola (92)	KA-1-0-13
58			Jhupra Khola (89)	KA-1-0-14
59			Basante Khola (87)	KA-1-0-15
60			Jugai Khola (84)	KA-1-0-16
61			Nune Gad (74)	KA-1-0-17
62			Garpung Khola (71)	KA-1-0-18
63			Burunge Khola (69)	KA-1-0-19
64			Phedi Khola (59)	KA-1-0-20
65			Holu Khola (59)	KA-1-0-21
66			Gija Gad (56)	KA-1-0-22
67			Girighat Khola (51)	KA-1-0-23
68			- (46)	KA-1-0-24
69			Ghatechaur Khola (39)	KA-1-0-25
70			Khahare Khola (34)	KA-1-0-26
71			Battise Khola (31)	KA-1-0-27
72			Obang Khola (31)	KA-1-0-28
73			- (31)	KA-1-0-29
74			Telpani Khola (29)	KA-1-0-30
75			Kalpani Khola (28)	KA-1-0-31

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
76			Phoigar Khola (27)	KA-1-0-32
77			Tattar Gad (25)	KA-1-0-33
78			Biurani Khola (21)	KA-1-0-34
79			Lahaghat Khola (21)	KA-1-0-35
80			Kali Khola (20)	KA-1-0-36
81	Humla Karnali Nadi (9104)			KA-2
82		Loti Karnali Nadi (1304)		KA-2-1
83			Take Khola (612)	KA-2-1-01
84			Mimibang Khola (371)	KA-2-1-02
85			Rauli Khola (104)	KA-2-1-03
86			Musyang Khola (60)	KA-2-1-04
87			Chhala Khola (26)	KA-2-1-05
88		Chuwa Khola (1300)		KA-2-2
89			Luruppa Khola (292)	KA-2-2-01
90			Ning Khola (239)	KA-2-2-02
91			Lachama Khola (118)	KA-2-2-03
92			Lare Khola (84)	KA-2-2-04
93			Tumling Khola (38)	KA-2-2-05
94			Ghatte Khola (36)	KA-2-2-06
95			Rakabu Khola (36)	KA-2-2-07
96			Talung Khola (35)	KA-2-2-08
97			- (32)	KA-2-2-09
98			Laregonba Khola (31)	KA-2-2-10
99			Ghalje Khola (27)	KA-2-2-11
100			Chhyalonba Khola (26)	KA-2-2-12
101		Limi Khola (1146)		KA-2-3
102			Telung Khola (276)	KA-2-3-01
103			Sakya Khola (151)	KA-2-3-02
104			Taisolu Khola (96)	KA-2-3-03
105			- (73)	KA-2-3-04
106			Til Khola (49)	KA-2-3-05
107			Halji Khola (31)	KA-2-3-06
108			Ning Khola (29)	KA-2-3-07
109			Bumuchhiya Khola (219)	KA-2-0-01
110			Kwalungwa Khola (195)	KA-2-0-02
111			Hepka Khola (163)	KA-2-0-03
112			Salli Khola (152)	KA-2-0-04

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
113			Galpha Gad (105)	KA-2-0-05
114			Gothi Khola (101)	KA-2-0-06
115			Tumkot Khola (66)	KA-2-0-07
116			Rip Gad (55)	KA-2-0-08
117			Phupharka Khola (54)	KA-2-0-09
118			Nehar Khola (41)	KA-2-0-10
119			Tarkesya Nadi (41)	KA-2-0-11
120			Gurgure Khola (37)	KA-2-0-12
121			Karanga Khola (32)	KA-2-0-13
122			Tangur Khola (32)	KA-2-0-14
123			Kudilla Khola (30)	KA-2-0-15
124			Kunwa Khola (26)	KA-2-0-16
125			Yangchu Khola (24)	KA-2-0-17
126			Puiya Khola (24)	KA-2-0-18
127			Kulla Gad (22)	KA-2-0-19
128			Limne Khola (20)	KA-2-0-20
129	West Seti Nadi (7370)			KA-3
130		Budhi Ganga Nadi (1739)		KA-3-1
131			Kailash Khola (278)	KA-3-1-01
132			Mala Gad (121)	KA-3-1-02
133			Bauli Gad (109)	KA-3-1-03
134			Ikdi Gad (87)	KA-3-1-04
135			Kodari Gad (68)	KA-3-1-05
136			Simtari Gad (61)	KA-3-1-06
137			Kasa Gad (57)	KA-3-1-07
138			Barju Gad (56)	KA-3-1-08
139			Thuli Ganga Nadi (54)	KA-3-1-09
140			Prabhali Gad (50)	KA-3-1-10
141			Sarani Gad (47)	KA-3-1-11
142			Simarawa Khola (47)	KA-3-1-12
143			Dogada Khola (45)	KA-3-1-13
144			Tipada Gad (42)	KA-3-1-14
145			Jijadi Gad (41)	KA-3-1-15
146			Tusari Gad (39)	KA-3-1-16
147			Chippe Khola (38)	KA-3-1-17
148			Lungreli Gad (28)	KA-3-1-18
149			Mana Gad (26)	KA-3-1-19
150			Gairi Gad (24)	KA-3-1-20

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
151			Madi Khola (20)	KA-3-1-21
152		Kalanga Nadi (558)		KA-3-2
153			Sani Gad (161)	KA-3-2-01
154			Sokar Gad (29)	KA-3-2-02
155			Syangbang Khola (424)	KA-3-0-01
156			Ghatganga Khola (350)	KA-3-0-02
157			Salimor Khola (254)	KA-3-0-03
158			Sakayal Khola (238)	KA-3-0-04
159			Chaira Khola (235)	KA-3-0-05
160			Suni Gad (213)	KA-3-0-06
161			Bauli Gad (205)	KA-3-0-07
162			Sayali Gad (186)	KA-3-0-08
163			Gaddi Gad (173)	KA-3-0-09
164			Jadari Gad (157)	KA-3-0-10
165			Nuwaghari Gad (134)	KA-3-0-11
166			Dhung Gad Khola (133)	KA-3-0-12
167			Tuda Gad (112)	KA-3-0-13
168			Taru Gad (99)	KA-3-0-14
169			Talkoti Gad (82)	KA-3-0-15
170			Dogaira Gad (77)	KA-3-0-16
171			Kala Gad (73)	KA-3-0-17
172			Talkot Gad (72)	KA-3-0-18
173			Samuha Gad (68)	KA-3-0-19
174			Chama Gad (63)	KA-3-0-20
175			Thalari Gad (49)	KA-3-0-21
176			Juil Gad (48)	KA-3-0-22
177			Lachhi Gad (48)	KA-3-0-23
178			Rakse Urai Khola (47)	KA-3-0-24
179			Gala Gad (45)	KA-3-0-25
180			Dwari Gad (42)	KA-3-0-26
181			Dungri Gad (42)	KA-3-0-27
182			Lisni Gad (41)	KA-3-0-28
183			Ana Gad (41)	KA-3-0-29
184			Golma Gad (39)	KA-3-0-30
185			Godare Khola (39)	KA-3-0-31
186			Dwari Gad (37)	KA-3-0-32
187			Dil Gad (30)	KA-3-0-33
188			Gudpal Khola (30)	KA-3-0-34
189			Melti Khola (26)	KA-3-0-35

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
190			Bhyagute Khola (26)	KA-3-0-36
191			Koireli Gad (24)	KA-3-0-37
192			Daukhar Khola (23)	KA-3-0-38
193			Rani Gad (23)	KA-3-0-39
194			Sir Khola (23)	KA-3-0-40
195			Nilkati Khola (22)	KA-3-0-41
196	Mugu Kar-nali Nadi (5314)			KA-4
197		Namlang Nadi (3530)		KA-4-1
198			Takla Khola (355)	KA-4-1-01
199			Nagong Khola (340)	KA-4-1-02
200			Keheing Khola (253)	KA-4-1-03
201			Tartang Khola (227)	KA-4-1-04
202			Polte Khola (197)	KA-4-1-05
203			Jhyanglung Khola (119)	KA-4-1-06
204			Sumdo Khola (117)	KA-4-1-07
205			Tangkya Khola (115)	KA-4-1-08
206			Sulung Khola (114)	KA-4-1-09
207			Korang Khola (110)	KA-4-1-10
208			Musi Khola (101)	KA-4-1-11
209			Ruka Khola (90)	KA-4-1-12
210			Swaksa Khola (77)	KA-4-1-13
211			Kanjirowa Khola (74)	KA-4-1-14
212			Mait Khola (73)	KA-4-1-15
213			Mukdem Khola (71)	KA-4-1-16
214			Khung Khola (71)	KA-4-1-17
215			Pukcheng Khola (67)	KA-4-1-18
216			Sije Khola (60)	KA-4-1-19
217			Tagre Khola (57)	KA-4-1-20
218			Moga Khola (43)	KA-4-1-21
219			Raphu Khola (41)	KA-4-1-22
220			Puwe Khola (40)	KA-4-1-23
221			Changpola Khola (30)	KA-4-1-24
222			Chhu Khola (24)	KA-4-1-25
223			Phanda Khola (24)	KA-4-1-26
224			Dhakpal Khola (22)	KA-4-1-27
225			Phor Khola (22)	KA-4-1-28
226		Mugu Khola (766)		KA-4-2

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
227			Kogi Khola (127)	KA-4-2-01
228			Talak Khola (111)	KA-4-2-02
229			Chham Khola (90)	KA-4-2-03
230			Kangja Khola (77)	KA-4-2-04
231			Takya Khola (59)	KA-4-2-05
232			Yenjam Khola (51)	KA-4-2-06
233			Kogichwa Khola (46)	KA-4-2-07
234			Gilang Khola (44)	KA-4-2-08
235			Chyamni Khola (131)	KA-4-0-01
236			Gam Gad (125)	KA-4-0-02
237			Luma Khola (90)	KA-4-0-03
238			Shobha Khola (85)	KA-4-0-04
239			Kang Khola (58)	KA-4-0-05
240			Riusa Khola (36)	KA-4-0-06
241			Rigda Khola (33)	KA-4-0-07
242			Logu Khola (28)	KA-4-0-08
243			Bumcha Khola (24)	KA-4-0-09
244			Rum Khola (23)	KA-4-0-10
245			Jima Khola (22)	KA-4-0-11
246			Serog Khola (22)	KA-4-0-12
247	Tila Nadi (3320)			KA-5
248		Hima Nadi (807)		KA-5-1
249			Khare Khola (74)	KA-5-1-01
250			Jaljala Khola (65)	KA-5-1-02
251			Pathar Khola (47)	KA-5-1-03
252			Lihi Khola (45)	KA-5-1-04
253			Daine Khola (38)	KA-5-1-05
254			Mahendra Mali Khola (31)	KA-5-1-06
255			Banganga Khola (28)	KA-5-1-07
256			Bau Khola (26)	KA-5-1-08
257			Odi Khola (23)	KA-5-1-09
258			Baj Gad (22)	KA-5-1-10
259			Bare Khola (20)	KA-5-1-11
260			Ghatte Khola (20)	KA-5-1-12
261		Juwa Nadi (549)		KA-5-2
262			Chaudhabis Khola (490)	KA-5-2-01
263			Ghodasain Khola (24)	KA-5-2-02
264			Ruru Bangchu Khola (383)	KA-5-0-01
265			Bheri Khola (309)	KA-5-0-02

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
266			Juli Odar Khola (247)	KA-5-0-03
267			Gidi Khola (193)	KA-5-0-04
268			Babila Khola (68)	KA-5-0-05
269			Goru Khola (67)	KA-5-0-06
270			Jogad Khola (43)	KA-5-0-07
271			Bharta Gad (41)	KA-5-0-08
272			Bali Gad (31)	KA-5-0-09
273			Um Khola (29)	KA-5-0-10
274			Jhula Khola (29)	KA-5-0-11
275			Simla Gad (25)	KA-5-0-12
276			Badkhi Khola (22)	KA-5-0-13
277	Lohare Kho- la (1017)			KA-6
278			Chhamghat Khola (273)	KA-6-0-01
279			Katti Khola (155)	KA-6-0-02
280			Parajuli Khola (154)	KA-6-0-03
281			Padam Khola (64)	KA-6-0-04
282			Tani Khola (38)	KA-6-0-05
283			Sot Khola (28)	KA-6-0-06
284			Rati Khola (27)	KA-6-0-07
285			Matela Khola (27)	KA-6-0-08
286			Chauratha Khola (27)	KA-6-0-09
287			Dwari Khola (23)	KA-6-0-10
288	Thuli Gad (890)			KA-7
289			Gadsera Gad (155)	KA-7-0-01
290			Kapadi Khola (132)	KA-7-0-02
291			Karmanas Gad (128)	KA-7-0-03
292			Kamala Nadi (41)	KA-7-0-04
293			Khairala Khola (40)	KA-7-0-05
294			Kumara Gad (39)	KA-7-0-06
295			Salle Khola (23)	KA-7-0-07
296	Kawadi Kho- la (818)			KA-8
297			Bichchhya Khola (182)	KA-8-0-01
298			Chhimdi Khola (143)	KA-8-0-02
299			Neti Khola (61)	KA-8-0-03
300			Titatiya Khola (55)	KA-8-0-04
301			Lepche Khola (37)	KA-8-0-05
302			Chyaune Gad (23)	KA-8-0-06
303		Orai Khola (309)		Orai Khola

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
304			Ambasa Khola (65)	KA-0-1-01
305			Jhamati Khola (52)	KA-0-1-02
306			Orai Khola (29)	KA-0-1-03
307			Orai Khola (25)	KA-0-1-04
308			Khetyad Khola (299)	KA-0-0-01
309			Tipgad Khola (250)	KA-0-0-02
310			Kunda Khola (221)	KA-0-0-03
311			Ram Gad (165)	KA-0-0-04
312			Raha Gad (138)	KA-0-0-05
313			Sannido Gad (119)	KA-0-0-06
314			Khulli Khola (107)	KA-0-0-07
315			Paduka Gad (90)	KA-0-0-08
316			Juddi Khola (81)	KA-0-0-09
317			Talamera Khola (77)	KA-0-0-10
318			Koltadi Khola (73)	KA-0-0-11
319			Belkher Khola (69)	KA-0-0-12
320			Paima Khola (66)	KA-0-0-13
321			Lapha Gad (59)	KA-0-0-14
322			Satdawa Khola (55)	KA-0-0-15
323			Gumna Nadi (52)	KA-0-0-16
324			Bota Khola (47)	KA-0-0-17
325			Phu Gad (40)	KA-0-0-18
326			Chuti Gad (38)	KA-0-0-19
327			Regil Khola (36)	KA-0-0-20
328			Phala Gad (36)	KA-0-0-21
329			Bungad Khola (35)	KA-0-0-22
330			Bhuka Khola (34)	KA-0-0-23
331			Limbu Khola (31)	KA-0-0-24
332			Lode Gad (30)	KA-0-0-25
333			Sera Khola (30)	KA-0-0-26
334			Betan Khola (29)	KA-0-0-27
335			Phulam Khola (28)	KA-0-0-28
336			Rudi Khola (28)	KA-0-0-29
337			Bhadali Nala (26)	KA-0-0-30
338			Kara Khola (24)	KA-0-0-31
339			Thini Khola (24)	KA-0-0-32
340			Rohati Khola (23)	KA-0-0-33
341			Bade Khola (22)	KA-0-0-34
342			Syaule Khola (22)	KA-0-0-35
343			Pogade Khola (21)	KA-0-0-36
344			Dogade Khola (20)	KA-0-0-37

Annex 4: Rivers of Level-2 to Level-4 in the Gandaki Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Kali Gandaki Nadi (11878)		
3		Badigad Khola (1986)	
4			Chhaldi Khola (409)
5			Daram Khola (337)
6			Nisi Khola (230)
7			Taman Khola (227)
8			Bhuji Khola (144)
9			Hugdi Khola (131)
10			Bhim Khola (98)
11			Darling Khola (40)
12			Labdi Khola (30)
13			Sisne Khola (26)
14			Jumdi Khola (23)
15			- (22)
16		Myagdi Khola (1089)	
17			Mudi Khola (251)
18			Kunaban Khola (95)
19			Dar Khola (78)
20			Ritung Khola (71)
21			Marang Khola (57)
22			- (40)
23			Chaurban Khola (37)
24			Singkos Khola (36)
25			Dang Khola (28)
26			Arje Khola (25)
27		Modi Khola (672)	
28			Bhurungdi Khola (88)
29			NULL (70)
30			Rati Khola (67)
31			Kimrong Khola (61)
32			Pati Khola (41)
33			Chhomrong Khola (40)
34			Malyangdi Khola (21)
35		Ridi Khola (598)	
36			Kachi Khola (118)
37			Keduwa Khola (112)
38			Sisne Khola (77)
39			Mathura Khola (74)
40			Bagali Khola (51)
41			Bhaise Khola (49)

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
42		Adhi Khola (477)	
43		Chilungpa Khola (444)	
44		Nhichung Khola (378)	
45		Dhechyang Khola (358)	
46		Raughat Khola (349)	
47		Dhami Khola (308)	
48		Mristi Khola (303)	
49		Charang Khola (270)	
50		Tangge Khola (253)	
51		Parung Khola (240)	
52		Nisdi Khola (227)	
53		Jyagdi Khola (198)	
54		Seti Khola (139)	
55		Kathe Khola (118)	
56		Narsing Khola (116)	
57		Maldi Khola (106)	
58		Jhong Khola (92)	
59		Theule Khola (85)	
60		Ghar Khola (76)	
61		Thini Khola (73)	
62		Kothi Khola (61)	
63		Panda Khola (60)	
64		Lumdi Khola (60)	
65		Thapa Khola (60)	
66		Puyung Khola (55)	
67		Lamahe Khola (48)	
68		Syang Khola (47)	
69		Ramdi Khola (46)	
70		Betini Khola (45)	
71		Pangpu Khola (40)	
72		Dungre Khola (38)	
73		Pongkyu Khola (37)	
74		Deusat Khola (36)	
75		Palung Khola (35)	
76		Gurusangba Khola (35)	
77		Samarkyung Khola (33)	
78		Sangboche Khola (29)	
79		Kurung Khola (29)	
80		Phurse Khola (29)	
81		Tama Khola (28)	
82		Jwala Khola (28)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
83		Pandur Khola (26)	
84		Aul Khola (26)	
85		Magar Khola (26)	
86		Chokhopani Khola (25)	
87		Dhingkyo Khola (24)	
88		Barandi Khola (24)	
89		Alaiche Khola (24)	
90		Phulmadi Khola (23)	
91		Rupse Khola (22)	
92		Doba Khola (22)	
93		Beg Khola (21)	
94		Amaka Khola (21)	
95		Karaudi Khola (21)	
96	Trishuli Upper (6607)		
97		Tadi Khola (663)	
98			Likhu Khola (166)
99			Chake Khola (69)
100			Sindhure Khola (60)
101			Darkhu Khola (49)
102			Belkot Khola (31)
103			Kuntung Khola (23)
104			Khare Khola (21)
105		Langtang Khola (578)	
106			Lansisa Glacier (55)
107			Laja Khola (38)
108			Chopche Khola (31)
109			Langtang Glacier (29)
110			- (29)
111			Ganesh Kunda Khola (21)
112		Bhotekoshi Nadi (286)	
113		Mahesh Khola (273)	
114		Thopal Khola (256)	
115		Chilime Khola (205)	
116		Kolpu Khola (171)	
117		Phalakhu Khola (147)	
118		Maltung Khola (114)	
119		Malekhu Khola (101)	
120		Belkhu Khola (88)	
121		Salakhu Khola (86)	
122		Trishuli Khola (59)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
123		Koshi Khola (57)	
124		Samari Khola (54)	
125		Bhyaure Khola (50)	
126	Budhi Gandaki Nadi (4995)		
127		Akhu Khola (748)	
128			Menchet Khola (144)
129			Tatopani (ilep) Khola (130)
130			Gandak Khani Khola (73)
131			Kintang Khola (57)
132			Akhu Khola (49)
133			Aphal Khola (33)
134			Lapang Khola (31)
135			Hahang Khola (29)
136			Baguwa Khola (25)
137		Syar Khola (640)	
138			Langdang Khola (113)
139			Sarpu Khola (93)
140			Changmam Khola (75)
141			Yangdol Khola (64)
142			Phurhung Khola (38)
143			Udilung Khola (25)
144			Sarti Khola (21)
145		Chhilung Khola (198)	
146		Hinang Khola (118)	
147		Machha Khola (106)	
148		Dobhan Khola (91)	
149		Larke Khola (78)	
150		Yaru Khola (76)	
151		Bhalu Khola (72)	
152		Istul Khola (68)	
153		Jyadul Khola (66)	
154		Serang Khola (62)	
155		Nimrung Khola (60)	
156		Richet Khola (58)	
157		Athahra Saya Khola (50)	
158		Pungen Glacier (50)	
159		Tom (dogni) Khola (40)	
160		Sangle Khola (36)	
161		Samno Khola (33)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
162		Mangpang Khola (32)	
163		Tendrang Khola (30)	
164		Serang Khola (29)	
165		Maste Khola (27)	
166		Chhargandi Khola (26)	
167		Sonam Glacier (26)	
168		Phujel Khola (23)	
169		Ghatta Khola (22)	
170		Gyalma Khola (21)	
171	Marsyangdi Nadi (4772)		
172		Nar Khola (881)	
173			Phu Khola (453)
174			Labse Khola (276)
175			Soti Khola (43)
176			Ghatte Khola (43)
177		Daraundi Nadi (606)	
178			Khar Khola (58)
179			Ludi Khola (57)
180			Rangrung Khola (34)
181			Bhusundi Khola (30)
182			Hudi Khola (29)
183			Jarang Khola (26)
184			Khol Khola (21)
185		Dudh Khola (389)	
186		Dordi Khola (352)	
187		Chepe Khola (310)	
188		Nadi Khola (218)	
189		Thorang Khola (150)	
190		Khudi Khola (137)	
191		Dana Khola (129)	
192		Chudi Khola (110)	
193		Paudi Khola (84)	
194		Myaldi Khola (61)	
195		Gangapurna Khola (55)	
196		Sabje Khola (51)	
197		Chhahare Khola (47)	
198		Julu Khola (35)	
199		Chaichangwa Khola (33)	
200		- (29)	
201		Phaudi Khola (26)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
202		China Khola (24)	
203		Ghatte Khola (24)	
204		Phache Khola (21)	
205		Tardi Khola (21)	
206	East Rapti Nadi (3035)		
207		Reu Khola (462)	
208		Manahari Khola (428)	
209		Khageri Khola (380)	
210		Lothar Khola (173)	
211		Karra Khola (126)	
212		Samari Khola (119)	
213		Dhungre Khola (94)	
214		Kerunga Ghol (82)	
215		Harda Khola (54)	
216		Stamai Ghol (54)	
217		Badel Khola (52)	
218		Sarakari Ghol (51)	
219		Betari Khola (49)	
220		Pantale Khola (44)	
221		Kisede Khola (41)	
222		Shobhapur Khola (35)	
223		Maiga Khola (35)	
224		Katle Khola (Hasta Khola) (25)	
225		Caunra Khola (24)	
226		Twangra Khola (24)	
227		Okhai Khola (21)	
228		Mandu Khola (21)	
229		Dumarsot Khola (20)	
230	East Seti Nadi (2936)		
231		Madi Nadi (1117)	
232			Midim Khola (178)
233			Rudi Khola (104)
234			Sange Khola (81)
235			Madkyu Khola (73)
236			Risti Khola (63)
237			Madme Khola (56)
238			Kalesti Khola (42)
239			Bardi Khola (31)
240			Khalte Khola (27)
241			Idi Khola (25)

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
242			Chipli Khola (24)
243			Kyadusyo Khola (21)
244		Phusre Khola (166)	
245		Mardi Khola (142)	
246		Kotre Khola (106)	
247		Kyangdi Khola (97)	
248		Saraudi Khola (93)	
249		Myagde Khola (69)	
250		Bijayapur Khola (65)	
251		Buldi Khola (55)	
252		Dhand Khola (54)	
253		Dihul Khola (47)	
254		Sardi Khola (37)	
255		Kali Khola (35)	
256		Pirung Khola (33)	
257		Seti Khola (32)	
258		Yangdi Khola (30)	
259		Sadhu Khola (28)	
260		Jyagdi Khola (26)	
261		Lima Khola (23)	
262		Chhabdi Khola (22)	
263	Binayi Khola (327)		
264		Dangre Khola (38)	
265		Khakara Khola (29)	
266		Sunai Khola (29)	
267		Jyamire Khola (25)	
268		Khahare Khola (20)	
269	Arung Khola (273)		
270	Gadar Khola (128)		
271	Dandjor Nadi (89)		
272	Kanaha Khola (73)		
273	Gindri Khola (72)		
274	Rigdi Khola (71)		
275	Deusat Khola (67)		
276	Hugdi Khola (54)		
277	Charaundi Khola (47)		
278	Beldiya Khola (39)		
279	Khahare Khola (38)		
280	Jayasri Khola (31)		
281	Pancha Nadi (29)		
282	Judhi Khola (27)		
283	Ban Khola (20)		

Annex 5: Details of sub-basins, watersheds and sub-watersheds in the the Gandaki Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				GA
2	Kali Gandaki Nadi (11878)			GA-1
3		Badigad Khola (1986)		GA-1-1
4			Chhaldi Khola (409)	GA-1-1-01
5			Daram Khola (337)	GA-1-1-02
6			Nisi Khola (230)	GA-1-1-03
7			Taman Khola (227)	GA-1-1-04
8			Bhuji Khola (144)	GA-1-1-05
9			Hugdi Khola (131)	GA-1-1-06
10			Bhim Khola (98)	GA-1-1-07
11			Darling Khola (40)	GA-1-1-08
12			Labdi Khola (30)	GA-1-1-09
13			Sisne Khola (26)	GA-1-1-10
14			Jumdi Khola (23)	GA-1-1-11
15			- (22)	GA-1-1-12
16		Myagdi Khola (1089)		GA-1-2
17			Mudi Khola (251)	GA-1-2-01
18			Kunaban Khola (95)	GA-1-2-02
19			Dar Khola (78)	GA-1-2-03
20			Ritung Khola (71)	GA-1-2-04
21			Marang Khola (57)	GA-1-2-05
22			- (40)	GA-1-2-06
23			Chaurban Khola (37)	GA-1-2-07
24			Singkos Khola (36)	GA-1-2-08
25			Dang Khola (28)	GA-1-2-09
26			Arje Khola (25)	GA-1-2-10
27		Modi Khola (672)		GA-1-3
28			Bhurungdi Khola (88)	GA-1-3-01
29			NULL (70)	GA-1-3-02
30			Rati Khola (67)	GA-1-3-03
31			Kimrong Khola (61)	GA-1-3-04
32			Pati Khola (41)	GA-1-3-05
33			Chhomrong Khola (40)	GA-1-3-06
34			Malyangdi Khola (21)	GA-1-3-07
35		Ridi Khola (598)		GA-1-4
36			Kachi Khola (118)	GA-1-4-01
37			Keduwa Khola (112)	GA-1-4-02
38			Sisne Khola (77)	GA-1-4-03

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
39			Mathura Khola (74)	GA-1-4-04
40			Bagali Khola (51)	GA-1-4-05
41			Bhaise Khola (49)	GA-1-4-06
42			Adhi Khola (477)	GA-1-0-01
43			Chilungpa Khola (444)	GA-1-0-02
44			Nhichung Khola (378)	GA-1-0-03
45			Dhechyang Khola (358)	GA-1-0-04
46			Raughat Khola (349)	GA-1-0-05
47			Dhami Khola (308)	GA-1-0-06
48			Mristi Khola (303)	GA-1-0-07
49			Charang Khola (270)	GA-1-0-08
50			Tangge Khola (253)	GA-1-0-09
51			Parung Khola (240)	GA-1-0-10
52			Nisdi Khola (227)	GA-1-0-11
53			Jyagdi Khola (198)	GA-1-0-12
54			Seti Khola (139)	GA-1-0-13
55			Kathe Khola (118)	GA-1-0-14
56			Narsing Khola (116)	GA-1-0-15
57			Maldi Khola (106)	GA-1-0-16
58			Jhong Khola (92)	GA-1-0-17
59			Theule Khola (85)	GA-1-0-18
60			Ghar Khola (76)	GA-1-0-19
61			Thini Khola (73)	GA-1-0-20
62			Kothi Khola (61)	GA-1-0-21
63			Panda Khola (60)	GA-1-0-22
64			Lumdi Khola (60)	GA-1-0-23
65			Thapa Khola (60)	GA-1-0-24
66			Puyung Khola (55)	GA-1-0-25
67			Lamahe Khola (48)	GA-1-0-26
68			Syang Khola (47)	GA-1-0-27
69			Ramdi Khola (46)	GA-1-0-28
70			Betini Khola (45)	GA-1-0-29
71			Pangpu Khola (40)	GA-1-0-30
72			Dungre Khola (38)	GA-1-0-31
73			Pongkyu Khola (37)	GA-1-0-32
74			Deusat Khola (36)	GA-1-0-33
75			Palung Khola (35)	GA-1-0-34
76			Gurusangba Khola (35)	GA-1-0-35
77			Samarkyung Khola (33)	GA-1-0-36
78			Sangboche Khola (29)	GA-1-0-37

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
79			Kurung Khola (29)	GA-1-0-38
80			Phurse Khola (29)	GA-1-0-39
81			Tama Khola (28)	GA-1-0-40
82			Jwala Khola (28)	GA-1-0-41
83			Pandur Khola (26)	GA-1-0-42
84			Aul Khola (26)	GA-1-0-43
85			Magar Khola (26)	GA-1-0-44
86			Chokhopani Khola (25)	GA-1-0-45
87			Dhingkyo Khola (24)	GA-1-0-46
88			Barandi Khola (24)	GA-1-0-47
89			Alaiche Khola (24)	GA-1-0-48
90			Phulmadi Khola (23)	GA-1-0-49
91			Rupse Khola (22)	GA-1-0-50
92			Doba Khola (22)	GA-1-0-51
93			Beg Khola (21)	GA-1-0-52
94			Amaka Khola (21)	GA-1-0-53
95			Karaudi Khola (21)	GA-1-0-54
96	Trishuli Upper (6607)			GA-2
97		Tadi Khola (663)		GA-2-1
98			Likhu Khola (166)	GA-2-1-01
99			Chake Khola (69)	GA-2-1-02
100			Sindhure Khola (60)	GA-2-1-03
101			Darkhu Khola (49)	GA-2-1-04
102			Belkot Khola (31)	GA-2-1-05
103			Kuntung Khola (23)	GA-2-1-06
104			Khare Khola (21)	GA-2-1-07
105		Langtang Khola (578)		GA-2-2
106			Lansisa Glacier (55)	GA-2-2-01
107			Laja Khola (38)	GA-2-2-02
108			Chopche Khola (31)	GA-2-2-03
109			Langtang Glacier (29)	GA-2-2-04
110			- (29)	GA-2-2-05
111			Ganesh Kunda Khola (21)	GA-2-2-06
112			Bhotekoshi Nadi (286)	GA-2-0-01
113			Mahesh Khola (273)	GA-2-0-02
114			Thopal Khola (256)	GA-2-0-03
115			Chilime Khola (205)	GA-2-0-04

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
116			Kolpu Khola (171)	GA-2-0-05
117			Phalakh Khola (147)	GA-2-0-06
118			Maltung Khola (114)	GA-2-0-07
119			Malekhu Khola (101)	GA-2-0-08
120			Belkhu Khola (88)	GA-2-0-09
121			Salakhu Khola (86)	GA-2-0-10
122			Trishuli Khola (59)	GA-2-0-11
123			Koshi Khola (57)	GA-2-0-12
124			Samari Khola (54)	GA-2-0-13
125			Bhyaure Khola (50)	GA-2-0-14
126	Budhi Gandaki Nadi (4995)			GA-3
127		Akhu Khola (748)		GA-3-1
128			Menchet Khola (144)	GA-3-1-01
129			Tatopani (ilep) Khola (130)	GA-3-1-02
130			Gandak Khani Khola (73)	GA-3-1-03
131			Kintang Khola (57)	GA-3-1-04
132			Akhu Khola (49)	GA-3-1-05
133			Aphal Khola (33)	GA-3-1-06
134			Lapang Khola (31)	GA-3-1-07
135			Hahang Khola (29)	GA-3-1-08
136			Baguwa Khola (25)	GA-3-1-09
137		Syar Khola (640)		GA-3-2
138			Langdang Khola (113)	GA-3-2-01
139			Sarpu Khola (93)	GA-3-2-02
140			Changmam Khola (75)	GA-3-2-03
141			Yangdol Khola (64)	GA-3-2-04
142			Phurhung Khola (38)	GA-3-2-05
143			Udilung Khola (25)	GA-3-2-06
144			Sarti Khola (21)	GA-3-2-07
145			Chhilung Khola (198)	GA-3-0-01
146			Hinang Khola (118)	GA-3-0-02
147			Machha Khola (106)	GA-3-0-03
148			Dobhan Khola (91)	GA-3-0-04
149			Larke Khola (78)	GA-3-0-05
150			Yaru Khola (76)	GA-3-0-06
151			Bhalu Khola (72)	GA-3-0-07
152			Istul Khola (68)	GA-3-0-08

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
153			Jyadul Khola (66)	GA-3-0-09
154			Serang Khola (62)	GA-3-0-10
155			Nimrung Khola (60)	GA-3-0-11
156			Richet Khola (58)	GA-3-0-12
157			Athahra Saya Khola (50)	GA-3-0-13
158			Pungen Glacier (50)	GA-3-0-14
159			Tom (dogni) Khola (40)	GA-3-0-15
160			Sangle Khola (36)	GA-3-0-16
161			Samno Khola (33)	GA-3-0-17
162			Mangpang Khola (32)	GA-3-0-18
163			Tendrang Khola (30)	GA-3-0-19
164			Serang Khola (29)	GA-3-0-20
165			Maste Khola (27)	GA-3-0-21
166			Chhargandi Khola (26)	GA-3-0-22
167			Sonam Glacier (26)	GA-3-0-23
168			Phujel Khola (23)	GA-3-0-24
169			Ghatta Khola (22)	GA-3-0-25
170			Gyalma Khola (21)	GA-3-0-26
171	Marsyangdi Nadi (4772)			GA-4
172		Nar Khola (881)		GA-4-1
173			Phu Khola (453)	GA-4-1-01
174			Labse Khola (276)	GA-4-1-02
175			Soti Khola (43)	GA-4-1-03
176			Ghatte Khola (43)	GA-4-1-04
177		Daraundi Nadi (606)		GA-4-2
178			Khar Khola (58)	GA-4-2-01
179			Ludi Khola (57)	GA-4-2-02
180			Rangrung Khola (34)	GA-4-2-03
181			Bhusundi Khola (30)	GA-4-2-04
182			Hudi Khola (29)	GA-4-2-05
183			Jarang Khola (26)	GA-4-2-06
184			Khol Khola (21)	GA-4-2-07
185			Dudh Khola (389)	GA-4-0-01
186			Dordi Khola (352)	GA-4-0-02
187			Chepe Khola (310)	GA-4-0-03
188			Nadi Khola (218)	GA-4-0-04
189			Thorang Khola (150)	GA-4-0-05
190			Khudi Khola (137)	GA-4-0-06

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
191			Dana Khola (129)	GA-4-0-07
192			Chudi Khola (110)	GA-4-0-08
193			Paudi Khola (84)	GA-4-0-09
194			Myaldi Khola (61)	GA-4-0-10
195			Gangapurna Khola (55)	GA-4-0-11
196			Sabje Khola (51)	GA-4-0-12
197			Chhahare Khola (47)	GA-4-0-13
198			Julu Khola (35)	GA-4-0-14
199			Chaichangwa Khola (33)	GA-4-0-15
200			- (29)	GA-4-0-16
201			Phaudi Khola (26)	GA-4-0-17
202			China Khola (24)	GA-4-0-18
203			Ghatte Khola (24)	GA-4-0-19
204			Phache Khola (21)	GA-4-0-20
205			Tardi Khola (21)	GA-4-0-21
206	East Rapti Nadi (3035)			GA-5
207			Reu Khola (462)	GA-5-0-01
208			Manahari Khola (428)	GA-5-0-02
209			Khageri Khola (380)	GA-5-0-03
210			Lothar Khola (173)	GA-5-0-04
211			Karra Khola (126)	GA-5-0-05
212			Samari Khola (119)	GA-5-0-06
213			Dhungre Khola (94)	GA-5-0-07
214			Kerunga Ghol (82)	GA-5-0-08
215			Harda Khola (54)	GA-5-0-09
216			Stamai Ghol (54)	GA-5-0-10
217			Badel Khola (52)	GA-5-0-11
218			Sarakari Ghol (51)	GA-5-0-12
219			Betari Khola (49)	GA-5-0-13
220			Pantale Khola (44)	GA-5-0-14
221			Kisede Khola (41)	GA-5-0-15
222			Shobhapur Khola (35)	GA-5-0-16
223			Maiga Khola (35)	GA-5-0-17
224			Katle Khola (Hasta Khola) (25)	GA-5-0-18
225			Caunra Khola (24)	GA-5-0-19
226			Twangra Khola (24)	GA-5-0-20
227			Okhai Khola (21)	GA-5-0-21

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
228			Mandu Khola (21)	GA-5-0-22
229			Dumarsot Khola (20)	GA-5-0-23
230	East Seti Nadi (2936)			GA-6
231		Madi Nadi (1117)		GA-6-1
232			Midim Khola (178)	GA-6-1-01
233			Rudi Khola (104)	GA-6-1-02
234			Sange Khola (81)	GA-6-1-03
235			Madkyu Khola (73)	GA-6-1-04
236			Risti Khola (63)	GA-6-1-05
237			Madme Khola (56)	GA-6-1-06
238			Kalesti Khola (42)	GA-6-1-07
239			Bardi Khola (31)	GA-6-1-08
240			Khalte Khola (27)	GA-6-1-09
241			Idi Khola (25)	GA-6-1-10
242			Chipli Khola (24)	GA-6-1-11
243			Kyadusyo Khola (21)	GA-6-1-12
244			Phusre Khola (166)	GA-6-0-01
245			Mardi Khola (142)	GA-6-0-02
246			Kotre Khola (106)	GA-6-0-03
247			Kyangdi Khola (97)	GA-6-0-04
248			Saraudi Khola (93)	GA-6-0-05
249			Myagde Khola (69)	GA-6-0-06
250			Bijayapur Khola (65)	GA-6-0-07
251			Buldi Khola (55)	GA-6-0-08
252			Dhand Khola (54)	GA-6-0-09
253			Dihul Khola (47)	GA-6-0-10
254			Sardi Khola (37)	GA-6-0-11
255			Kali Khola (35)	GA-6-0-12
256			Pirung Khola (33)	GA-6-0-13
257			Seti Khola (32)	GA-6-0-14
258			Yangdi Khola (30)	GA-6-0-15
259			Sadhu Khola (28)	GA-6-0-16
260			Jyagdi Khola (26)	GA-6-0-17
261			Lima Khola (23)	GA-6-0-18
262			Chhabdi Khola (22)	GA-6-0-19
263		Binayi Khola (327)		Binayi Khola
264			Dangre Khola (38)	GA-0-1-01
265			Khakara Khola (29)	GA-0-1-02
266			Sunai Khola (29)	GA-0-1-03

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
267			Jyamire Khola (25)	GA-0-1-04
268			Khahare Khola (20)	GA-0-1-05
269			Arung Khola (273)	GA-0-0-01
270			Gadar Khola (128)	GA-0-0-02
271			Dandjor Nadi (89)	GA-0-0-03
272			Kanaha Khola (73)	GA-0-0-04
273			Gindri Khola (72)	GA-0-0-05
274			Rigdi Khola (71)	GA-0-0-06
275			Deusat Khola (67)	GA-0-0-07
276			Hugdi Khola (54)	GA-0-0-08
277			Charaundi Khola (47)	GA-0-0-09
278			Beldiya Khola (39)	GA-0-0-10
279			Khahare Khola (38)	GA-0-0-11
280			Jayasri Khola (31)	GA-0-0-12
281			Pancha Nadi (29)	GA-0-0-13
282			Judhi Khola (27)	GA-0-0-14
283			Ban Khola (20)	GA-0-0-15

Annex 6: Rivers of Level-2 to Level-4 in the Koshi Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Arun Nadi (29890)		
3		Pikhuwa Khola (584)	
4			Kawa Khola (103)
5			Akhuwa Khola (89)
6			Siktell Khola (71)
7			Behere Khola (52)
8			Hingkuwa Khola (29)
9			Sera Khola (28)
10			Wachinle Khola (27)
11			Malapu Khola (21)
12		Sabha Khola (551)	
13			Hewa Khola (149)
14			Langkhuwa Khola (68)
15			Pangma Khola (55)
16			Yaksuwa Khola (36)
17			Giddhe Khola (30)
18			Kusuwa Khola (28)
19			Khakuwa Khola (24)
20		Barun Nadi (470)	
21		Sangkhuwa Khola (350)	
22		Piluwa Khola (315)	
23		Chhujung Khola (237)	
24		Apsuwa Khola (219)	
25		Irkhua Khola (206)	
26		Isuwa Khola (188)	
27		Ikhuwa Khola (165)	
28		Yangkhuwa Khola (123)	
29		Kasuwa Khola (111)	
30		Bakang Khola (94)	
31		Leguwa Khola (90)	
32		Mangmaya Khola (85)	
33		Induwa Khola (82)	
34		Leksuwa Khola (80)	
35		Chirkhuwa Khola (75)	
36		Muga Khola (73)	
37		Hangraha Khola (59)	
38		Sursing Khola (56)	
39		Khakuwa Khola (40)	
40		Kewa Khola (35)	
41		Phakuwa Khola (26)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
42		Hangdak Khola (24)	
43		Laguwa Khola (23)	
44		Chepuwa Khola (22)	
45		Kaguwa Khola (22)	
46	Tamor Nadi (6051)		
47		Kabeli Nadi (887)	
48			Iwa Khola (265)
49			Tawa Khola (113)
50			Phawa Khola (109)
51			Handi Khola (48)
52			Amji Khola (36)
53			Khaksewa Khola (31)
54			Phawa Khola (28)
55		Ghunsa Khola (743)	
56			Kanchanjunga Glacier (160)
57			Lhonak Glacier (61)
58			Yamtari Khola (55)
59			Kumbhakarna (jano) Glacier (49)
60			Ramdang Glacier (42)
61			Nupchu Khola (41)
62			Chhyatungdinga Glacier (30)
63			Rate Khola (25)
64		Mewa Khola (580)	
65			Palung Khola (203)
66			Siwa Khola (145)
67			Lowa Khola (28)
68			- (20)
69		Yangma Khola (417)	
70		Hewa Khola (370)	
71		Simbua Khola (269)	
72		Nawa Khola (204)	
73		Maiwa Khola (197)	
74		Nibhu Khola (178)	
75		Lambu Khola (162)	
76		Khoranga Khola (160)	
77		Sowa Khola (127)	
78		Koya Khola (116)	
79		Teliya Khola (78)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
80		Tangkhuwa Khola (73)	
81		Chharuwa Khola (66)	
82		Leuti Khola (49)	
83		Sobuwa Khola (43)	
84		Raghuwa Khola (39)	
85		Patle Khola (38)	
86		Dingsamba Khola (34)	
87		Singjengma Khola (34)	
88		Andheri Khola (33)	
89		Thakpa Khola (31)	
90		Andheri Khola (31)	
91		Nuwa Khola (30)	
92		Mendolung Khola (29)	
93		Menthuma Khola (25)	
94		Sisne Khola (25)	
95		Sejangma Khola (24)	
96		Tengwa Khola (23)	
97		Phedi Khola (23)	
98		Tamewa Khola (20)	
99		Phunguwa Khola (20)	
100	Tamakoshi Nadi (4121)		
101		Khimti Khola (445)	
102		Rolwaling Khola (306)	
103		Singati Khola (232)	
104		Khare Khola (230)	
105		Lapche Khola (190)	
106		Charange Khola (140)	
107		Bhatauli Khola (101)	
108		Milti Khola (69)	
109		Chyadu Khola (67)	
110		Gopi Khola (54)	
111		Sipring Khola (45)	
112		Dolti Khola (44)	
113		Gumu Khola (39)	
114		Ranjor Khola (37)	
115		Mahadev Khola (35)	
116		Jhyaku Khola (35)	
117		Sukajor Khola (33)	
118		Ghyang Khola (33)	
119		Tilpung Khola (27)	
120		Tinekhu Khola (27)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
121		Jum Khola (24)	
122		Gongar Khola (23)	
123	Dudhkoshi Nadi (4053)		
124		Hongu Khola (604)	
125			Budum Khola (50)
126			Kangkhu Khola (38)
127			Bhuwa Khola (25)
128			Bejo Khola (24)
129			- (22)
130		Solu Khola (533)	
131			Sisa Khola (98)
132			Junbesi Khola (93)
133			Lodir Khola (31)
134			Khahare Khola (26)
135			Thado Khola (25)
136		Bhotekoshi Nadi (428)	
137		Rawa Khola (403)	
138		Imja Khola (375)	
139		Inkhu Khola (305)	
140		Thotane Khola (137)	
141		Dudhkund Khola (114)	
142		Lumding Khola (95)	
143		- (47)	
144		Kaku Khola (47)	
145		Rauje Khola (46)	
146		Kyasar Khola (45)	
147		Deku Khola (34)	
148		Ramdu Khola (28)	
149		Pangkhu Khola (25)	
150		Kusumlanga Khola (24)	
151		Dudu Khola (24)	
152		Khari Khola (24)	
153		Mekhu Khola (24)	
154		Mahadev Khola (22)	
155	Sunkoshi Nadi (3389)		
156		Balephi Khola (683)	
157			Nyamyasa Masai Khola (121)
158			Nyasem Khola (87)
159			Lagen Khola (82)
160			Baramchi Khola (33)

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
161			Kubhinde Khola (32)
162			Yambling Khola (25)
163			Selang Khola (22)
164		Bhotekoshi Nadi (368)	
165		Bhuse Khola (42)	
166		- (34)	
167		Tauthali Khola (30)	
168		Hadi Khola (28)	
169		Dadi Khola (27)	
170	Indrawati Nadi (1227)		
171		Melamchi Khola (324)	
172		Jhyari Khola (120)	
173		Yangri Khola (118)	
174		Larke Khola (117)	
175		Cha Khola (82)	
176		Hadi Khola (51)	
177		Sindhu Khola (51)	
178		Dhad Khola (35)	
179		Jarke Khola (22)	
180	Likhu Khola (1048)		
181		Nupche Khola (109)	
182		Silkhu Khola (88)	
183		Buku Khola (71)	
184		Chulepu Khola (46)	
185		Phalate Khola (45)	
186		Kinja Khola (32)	
187		Marbu Khola (29)	
188		Pokali Khola (29)	
189		Perung Khola (25)	
190		Chokti Khola (25)	
191		Banauti Khola (24)	
192		Sapsu Khola (24)	
193		Larkhu Khola (23)	
194		Sailung Khola (22)	
195		Phundri Khola (22)	
196	Trijuga Nadi (736)		
197		Baruwa Khola (81)	
198		Saraswati Khola (41)	
199		Kang Khola (35)	
200		Devijor Khola (32)	
201		Kali Khola (32)	

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
202		Duwar Khola (31)	
203		Lohale Khola (29)	
204		Chhaude Khola (24)	
205	Rosi Khola (562)		
206		Punyamati Khola (64)	
207		Bebbar Khola (46)	
208		Ladku Khola (44)	
209		Dapcha Khola (37)	
210		Bhyakur Khola (22)	
211		Bhugdeu Khola (20)	
212	Malung Khola (411)		
213		Sepli Khola (61)	
214		Solung Khola (31)	
215		Elung Khola (24)	
216		Poktin Khola (23)	
217	Sapsup Khola (358)		
218		Tawa Khola (59)	
219		Dikhuwa Khola (58)	
220		Miya Khola (50)	
221		Kharuwa Khola (24)	
222	Chauri Khola (327)		
223		Khani Khola (80)	
224		Sailung Khola (46)	
225		Pheda Khola (34)	
226		Golang Khola (32)	
227		Waphal Khola (25)	
228		Ghatte Khola (23)	
229		Bhalu Khola (20)	
230	Sawa Khola (182)		
231	Jhiku Khola (140)		
232	Rasuwa Khola (120)		
233	Buwa Khola (110)		
234	Ekhuwa Khola (106)		
235	Ghatte Khola (88)		
236	Mahuli Nadi (84)		
237	Laiku Khola (80)		
238	Waksu Khola (77)		
239	Tuwa Khola (63)		
240	Bahadur Khola (57)		
241	Sokhu Khola (51)		
242	Bitijor Khola (46)		

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
243	Sorung Khola (45)		
244	Kokaha Khola (44)		
245	Rangkula Khola (38)		
246	Pauda Khola (30)		
247	Dhamile Khola (29)		
248	Patnali Khola (26)		
249	Salle Khola (26)		
250	Gopi Khola (25)		
251	Chhatang Khola (24)		
252	Gideri Khola (23)		
253	Makhuwa Khola (23)		
254	Bandijor Khola (23)		
255	Luluwa Khola (23)		
256	Adheri Khola (23)		
257	Tyau Khola (23)		
258	Rakuli Khola (22)		
259	Niguli Khola (21)		
260	Baeku Khola (21)		

Annex 7: Details of sub-basins, watersheds and sub-watersheds in the Koshi Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				KO
2	Arun Nadi (29890)			KO-1
3		Pikhuwa Khola (584)		KO-1-1
4			Kawa Khola (103)	KO-1-1-01
5			Akhuwa Khola (89)	KO-1-1-02
6			Siktell Khola (71)	KO-1-1-03
7			Behere Khola (52)	KO-1-1-04
8			Hingkuwa Khola (29)	KO-1-1-05
9			Sera Khola (28)	KO-1-1-06
10			Wachinle Khola (27)	KO-1-1-07
11			Malapu Khola (21)	KO-1-1-08
12		Sabha Khola (551)		KO-1-2
13			Hewa Khola (149)	KO-1-2-01
14			Langkhuwa Khola (68)	KO-1-2-02
15			Pangma Khola (55)	KO-1-2-03
16			Yaksuwa Khola (36)	KO-1-2-04
17			Giddhe Khola (30)	KO-1-2-05
18			Kusuwa Khola (28)	KO-1-2-06
19			Khakuwa Khola (24)	KO-1-2-07
20			Barun Nadi (470)	KO-1-0-01
21			Sangkhuwa Khola (350)	KO-1-0-02
22			Piluwa Khola (315)	KO-1-0-03
23			Chhujung Khola (237)	KO-1-0-04
24			Apsuwa Khola (219)	KO-1-0-05
25			Irkhuwa Khola (206)	KO-1-0-06
26			Isuwa Khola (188)	KO-1-0-07
27			Ikhuwa Khola (165)	KO-1-0-08
28			Yangkhuwa Khola (123)	KO-1-0-09
29			Kasuwa Khola (111)	KO-1-0-10
30			Bakang Khola (94)	KO-1-0-11
31			Leguwa Khola (90)	KO-1-0-12
32			Mangmaya Khola (85)	KO-1-0-13
33			Induwa Khola (82)	KO-1-0-14
34			Leksuwa Khola (80)	KO-1-0-15
35			Chirkhuwa Khola (75)	KO-1-0-16
36			Muga Khola (73)	KO-1-0-17
37			Hangraha Khola (59)	KO-1-0-18

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
38			Sursing Khola (56)	KO-1-0-19
39			Khakuwa Khola (40)	KO-1-0-20
40			Kewa Khola (35)	KO-1-0-21
41			Phakuwa Khola (26)	KO-1-0-22
42			Hangdak Khola (24)	KO-1-0-23
43			Laguwa Khola (23)	KO-1-0-24
44			Chepuwa Khola (22)	KO-1-0-25
45			Kaguwa Khola (22)	KO-1-0-26
46	Tamor Nadi (6051)			KO-2
47		Kabeli Nadi (887)		KO-2-1
48			Iwa Khola (265)	KO-2-1-01
49			Tawa Khola (113)	KO-2-1-02
50			Phawa Khola (109)	KO-2-1-03
51			Handi Khola (48)	KO-2-1-04
52			Amji Khola (36)	KO-2-1-05
53			Khaksewa Khola (31)	KO-2-1-06
54			Phawa Khola (28)	KO-2-1-07
55		Ghunsa Khola (743)		KO-2-2
56			Kanchanjungha Glacier (160)	KO-2-2-01
57			Lhonak Glacier (61)	KO-2-2-02
58			Yamtari Khola (55)	KO-2-2-03
59			Kumbhakarna (jano) Glacier (49)	KO-2-2-04
60			Ramdang Glacier (42)	KO-2-2-05
61			Nupchu Khola (41)	KO-2-2-06
62			Chhyatungdinga Glacier (30)	KO-2-2-07
63			Rate Khola (25)	KO-2-2-08
64		Mewa Khola (580)		KO-2-3
65			Palung Khola (203)	KO-2-3-01
66			Siwa Khola (145)	KO-2-3-02
67			Lowa Khola (28)	KO-2-3-03
68			- (20)	KO-2-3-04
69			Yangma Khola (417)	KO-2-0-01
70			Hewa Khola (370)	KO-2-0-02
71			Simbua Khola (269)	KO-2-0-03
72			Nawa Khola (204)	KO-2-0-04
73			Maiwa Khola (197)	KO-2-0-05
74			Nibhu Khola (178)	KO-2-0-06

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
75			Lambu Khola (162)	KO-2-0-07
76			Khoranga Khola (160)	KO-2-0-08
77			Sowa Khola (127)	KO-2-0-09
78			Koya Khola (116)	KO-2-0-10
79			Teliya Khola (78)	KO-2-0-11
80			Tangkhuwa Khola (73)	KO-2-0-12
81			Chharuwa Khola (66)	KO-2-0-13
82			Leuti Khola (49)	KO-2-0-14
83			Sobuwa Khola (43)	KO-2-0-15
84			Raghuwa Khola (39)	KO-2-0-16
85			Patle Khola (38)	KO-2-0-17
86			Dingsamba Khola (34)	KO-2-0-18
87			Singjengma Khola (34)	KO-2-0-19
88			Andheri Khola (33)	KO-2-0-20
89			Thakpa Khola (31)	KO-2-0-21
90			Andheri Khola (31)	KO-2-0-22
91			Nuwa Khola (30)	KO-2-0-23
92			Mendolung Khola (29)	KO-2-0-24
93			Menthuma Khola (25)	KO-2-0-25
94			Sisne Khola (25)	KO-2-0-26
95			Sejangma Khola (24)	KO-2-0-27
96			Tengwa Khola (23)	KO-2-0-28
97			Phedi Khola (23)	KO-2-0-29
98			Tamewa Khola (20)	KO-2-0-30
99			Phunguwa Khola (20)	KO-2-0-31
100	Tamakoshi Nadi (4121)			KO-3
101			Khimti Khola (445)	KO-3-0-01
102			Rolwaling Khola (306)	KO-3-0-02
103			Singati Khola (232)	KO-3-0-03
104			Khare Khola (230)	KO-3-0-04
105			Lapche Khola (190)	KO-3-0-05
106			Charange Khola (140)	KO-3-0-06
107			Bhatauli Khola (101)	KO-3-0-07
108			Milti Khola (69)	KO-3-0-08
109			Chyadu Khola (67)	KO-3-0-09

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
110			Gopi Khola (54)	KO-3-0-10
111			Sipring Khola (45)	KO-3-0-11
112			Dolti Khola (44)	KO-3-0-12
113			Gumu Khola (39)	KO-3-0-13
114			Ranjor Khola (37)	KO-3-0-14
115			Mahadev Khola (35)	KO-3-0-15
116			Jhyaku Khola (35)	KO-3-0-16
117			Sukajor Khola (33)	KO-3-0-17
118			Ghyang Khola (33)	KO-3-0-18
119			Tilpung Khola (27)	KO-3-0-19
120			Tinekhu Khola (27)	KO-3-0-20
121			Jum Khola (24)	KO-3-0-21
122			Gongar Khola (23)	KO-3-0-22
123	Dudhkoshi Nadi (4053)			KO-4
124		Hongu Khola (604)		KO-4-1
125			Budum Khola (50)	KO-4-1-01
126			Kangkhu Khola (38)	KO-4-1-02
127			Bhuwa Khola (25)	KO-4-1-03
128			Bejo Khola (24)	KO-4-1-04
129			- (22)	KO-4-1-05
130		Solu Khola (533)		KO-4-2
131			Dudhkund Khola (114)	KO-4-2-01
132			Sisa Khola (98)	KO-4-2-02
133			Junbesi Khola (93)	KO-4-2-03
134			Lodir Khola (31)	KO-4-2-04
135			Khahare Khola (26)	KO-4-2-05
136			Thado Khola (25)	KO-4-2-06
137			Bhotekoshi Nadi (428)	KO-4-0-01
138			Rawa Khola (403)	KO-4-0-02
139			Imja Khola (375)	KO-4-0-03
140			Inkhu Khola (305)	KO-4-0-04
141			Thotane Khola (137)	KO-4-0-05
142			Lumding Khola (95)	KO-4-0-06
143			- (47)	KO-4-0-07
144			Kaku Khola (47)	KO-4-0-08
145			Rauje Khola (46)	KO-4-0-09
146			Kyasar Khola (45)	KO-4-0-10
147			Deku Khola (34)	KO-4-0-11

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
148			Ramdu Khola (28)	KO-4-0-12
149			Pangkhu Khola (25)	KO-4-0-13
150			Kusumlanga Khola (24)	KO-4-0-14
151			Dudu Khola (24)	KO-4-0-15
152			Khari Khola (24)	KO-4-0-16
153			Mekhu Khola (24)	KO-4-0-17
154			Mahadev Khola (22)	KO-4-0-18
155	Sunkoshi Nadi (3389)			KO-5
156		Balephi Khola (683)		KO-5-1
157			Nyamyasa Masai Khola (121)	KO-5-1-01
158			Nyasem Khola (87)	KO-5-1-02
159			Lagen Khola (82)	KO-5-1-03
160			Baramchi Khola (33)	KO-5-1-04
161			Kubhinde Khola (32)	KO-5-1-05
162			Yambling Khola (25)	KO-5-1-06
163			Selang Khola (22)	KO-5-1-07
164			Bhotekoshi Nadi (368)	KO-5-0-01
165			Bhuse Khola (42)	KO-5-0-02
166			- (34)	KO-5-0-03
167			Tauthali Khola (30)	KO-5-0-04
168			Hadi Khola (28)	KO-5-0-05
169			Dadi Khola (27)	KO-5-0-06
170	Indrawati Nadi (1227)			KO-6
171			Melamchi Khola (324)	KO-6-0-01
172			Jhyari Khola (120)	KO-6-0-02
173			Yangri Khola (118)	KO-6-0-03
174			Larke Khola (117)	KO-6-0-04
175			Cha Khola (82)	KO-6-0-05
176			Hadi Khola (51)	KO-6-0-06
177			Sindhu Khola (51)	KO-6-0-07
178			Dhad Khola (35)	KO-6-0-08
179			Jarke Khola (22)	KO-6-0-09
180	Likhu Khola (1048)			KO-7
181			Nupche Khola (109)	KO-7-0-01
182			Silkhu Khola (88)	KO-7-0-02
183			Buku Khola (71)	KO-7-0-03

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
184			Chulepu Khola (46)	KO-7-0-04
185			Phalate Khola (45)	KO-7-0-05
186			Kinja Khola (32)	KO-7-0-06
187			Marbu Khola (29)	KO-7-0-07
188			Pokali Khola (29)	KO-7-0-08
189			Perung Khola (25)	KO-7-0-09
190			Chokti Khola (25)	KO-7-0-10
191			Banauti Khola (24)	KO-7-0-11
192			Sapsu Khola (24)	KO-7-0-12
193			Larkhu Khola (23)	KO-7-0-13
194			Sailung Khola (22)	KO-7-0-14
195			Phundri Khola (22)	KO-7-0-15
196	Trijuga Nadi (736)			KO-8
197			Baruwa Khola (81)	KO-8-0-01
198			Lama Khola (49)	KO-8-0-02
199			Saraswati Khola (41)	KO-8-0-03
200			Kang Khola (35)	KO-8-0-04
201			Devijor Khola (32)	KO-8-0-05
202			Kali Khola (32)	KO-8-0-06
203			Duwar Khola (31)	KO-8-0-07
204			Lohale Khola (29)	KO-8-0-08
205			Chhaude Khola (24)	KO-8-0-09
206		Rosi Khola (562)		Rosi Khola
207			Punyamati Khola (64)	KO-0-1-01
208			Bebar Khola (46)	KO-0-1-02
209			Ladku Khola (44)	KO-0-1-03
210			Dapcha Khola (37)	KO-0-1-04
211			Bhyakur Khola (22)	KO-0-1-05
212			Bhugdeu Khola (20)	KO-0-1-06
213		Malung Khola (411)		Malung Khola
214			Sepi Khola (61)	KO-0-2-01
215			Solung Khola (31)	KO-0-2-02
216			Elung Khola (24)	KO-0-2-03
217			Poktin Khola (23)	KO-0-2-04
218		Sapsup Khola (358)		Sapsup Khola
219			Tawa Khola (59)	KO-0-3-01
220			Dikhuwa Khola (58)	KO-0-3-02
221			Miya Khola (50)	KO-0-3-03
222			Kharuwa Khola (24)	KO-0-3-04

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
223		Chauri Khola (327)		Chauri Khola
224			Khani Khola (80)	KO-0-4-01
225			Sailung Khola (46)	KO-0-4-02
226			Pheda Khola (34)	KO-0-4-03
227			Golang Khola (32)	KO-0-4-04
228			Waphal Khola (25)	KO-0-4-05
229			Ghatte Khola (23)	KO-0-4-06
230			Bhalu Khola (20)	KO-0-4-07
231			Sawa Khola (182)	KO-0-0-01
232			Jhiku Khola (140)	KO-0-0-02
233			Rasuwa Khola (120)	KO-0-0-03
234			Buwa Khola (110)	KO-0-0-04
235			Ekhuwa Khola (106)	KO-0-0-05
236			Ghatte Khola (88)	KO-0-0-06
237			Mahuli Nadi (84)	KO-0-0-07
238			Laiku Khola (80)	KO-0-0-08
239			Waksu Khola (77)	KO-0-0-09
240			Tuwa Khola (63)	KO-0-0-10
241			Bahadur Khola (57)	KO-0-0-11
242			Sokhu Khola (51)	KO-0-0-12
243			Bitijor Khola (46)	KO-0-0-13
244			Sorung Khola (45)	KO-0-0-14
245			Kokaha Khola (44)	KO-0-0-15
246			Rangkula Khola (38)	KO-0-0-16
247			Pauda Khola (30)	KO-0-0-17
248			Dhamile Khola (29)	KO-0-0-18
249			Patnali Khola (26)	KO-0-0-19
250			Salle Khola (26)	KO-0-0-20
251			Gopi Khola (25)	KO-0-0-21
252			Chhatang Khola (24)	KO-0-0-22
253			Gideri Khola (23)	KO-0-0-23
254			Makhuwa Khola (23)	KO-0-0-24
255			Bandijor Khola (23)	KO-0-0-25
256			Luluwa Khola (23)	KO-0-0-26
257			Adheri Khola (23)	KO-0-0-27
258			Tyau Khola (23)	KO-0-0-28
259			Rakuli Khola (22)	KO-0-0-29
260			Niguli Khola (21)	KO-0-0-30
261			Baeku Khola (21)	KO-0-0-31
262			Siswa Khola (20)	KO-0-0-32

Annex 8: Rivers of Level-2 to Level-4 in the Mahakali Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Chamaliya Nadi (1590)		
3		Jamadi Gad (232)	
4		Nau Gad (209)	
5		Chhetiganga Gad (158)	
6		Chhumchhum Gad (77)	
7		Nwa Gad (70)	
8		Rugru Gad (69)	
9		Dhik Gad (60)	
10		Rokhab Gad (57)	
11		Gandi Gad (55)	
12		Makari Gad (44)	
13		Bhabiya Gad (37)	
14		Thadgadi Gad (25)	
15		Rithe Gad (25)	
16		Thadiul Gad (23)	
17		Gokule Gad (23)	
18		Gola Gad (23)	
19		Agari Gad (20)	
20	Surnaya Gad (835)		
21		Doti Gad (324)	
22		Agadi Gad (46)	
23		Kaksyali Gad (37)	
24		Shyadi Gad (37)	
25		Runighat Gad (32)	
26		Dhole Khola (26)	
27		Bakot Gad (26)	
28		Ratyadi Gad (23)	
29	Rangun Khola (478)		
30		Puntura Khola (126)	
31		Sun Khola (48)	
32		Baniyal Khola (45)	
33		Kuledi Khola (42)	
34		Gangkhet Khola (35)	
35		Kalena Khola (29)	
36	Tingkar Khola (344)		
37		Nampa Khola (136)	
38		Chhachang Khola (68)	
39		Dongkang Khola (51)	
40		Ghatte Khola (20)	
41	Pathang Khola (121)		

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
42	Tampa Khola (89)		
43	Sirse Gad (86)		
44	Garma Gad (81)		
45	Parmoli Gad (69)		
46	Sadani Khola (59)		
47	Api Khola (53)		
48	Bhartola Gad (50)		
49	Rupali Gad (47)		
50	Kala Gad (46)		
51	Nilgad Gad (46)		
52	Lasku Khola (40)		
53	Thali Gad (37)		
54	Nijang Gad (27)		
55	Pangkha Gad (27)		
56	Jogbuda Nadi (26)		
57	Baku Gad (24)		
58	Matela Gad (24)		
59	Tilkeni Khola (23)		
60	Lali Gad (23)		
61	Lilinti Khola (22)		
62	Kulau Khola (21)		

Annex 9: Details of sub-basins, watersheds and sub-watersheds in the Mahakali Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				MA
2	Chamaliya Nadi (1590)			MA-1
3			Jamadi Gad (232)	MA-1-0-01
4			Nau Gad (209)	MA-1-0-02
5			Chhetiganga Gad (158)	MA-1-0-03
6			Chhumchhum Gad (77)	MA-1-0-04
7			Nwa Gad (70)	MA-1-0-05
8			Rugru Gad (69)	MA-1-0-06
9			Dhik Gad (60)	MA-1-0-07
10			Rokhab Gad (57)	MA-1-0-08
11			Gandi Gad (55)	MA-1-0-09
12			Makari Gad (44)	MA-1-0-10
13			Bhabiya Gad (37)	MA-1-0-11
14			Thadgadi Gad (25)	MA-1-0-12
15			Rithe Gad (25)	MA-1-0-13
16			Thadiul Gad (23)	MA-1-0-14
17			Gokule Gad (23)	MA-1-0-15
18			Gola Gad (23)	MA-1-0-16
19			Agari Gad (20)	MA-1-0-17
20	Surnaya Gad (835)			MA-2
21			Doti Gad (324)	MA-2-0-01
22			Agadi Gad (46)	MA-2-0-02
23			Kaksyali Gad (37)	MA-2-0-03
24			Shyadi Gad (37)	MA-2-0-04
25			Runighat Gad (32)	MA-2-0-05
26			Dhole Khola (26)	MA-2-0-06
27			Bakot Gad (26)	MA-2-0-07
28			Ratyadi Gad (23)	MA-2-0-08
29		Rangun Khola (478)		Rangun Khola
30			Puntura Khola (126)	MA-0-1-01
31			Sun Khola (48)	MA-0-1-02
32			Baniyal Khola (45)	MA-0-1-03
33			Kuledi Khola (42)	MA-0-1-04
34			Gangkhet Khola (35)	MA-0-1-05
35			Kalena Khola (29)	MA-0-1-06
36		Tingkar Khola (344)		Tingkar Khola

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
37			Nampa Khola (136)	MA-0-2-01
38			Chhachang Khola (68)	MA-0-2-02
39			Dongkang Khola (51)	MA-0-2-03
40			Ghatte Khola (20)	MA-0-2-04
41			Pathang Khola (121)	MA-0-0-01
42			Tampa Khola (89)	MA-0-0-02
43			Sirse Gad (86)	MA-0-0-03
44			Garma Gad (81)	MA-0-0-04
45			Parmoli Gad (69)	MA-0-0-05
46			Sadani Khola (59)	MA-0-0-06
47			Api Khola (53)	MA-0-0-07
48			Bhartola Gad (50)	MA-0-0-08
49			Rupali Gad (47)	MA-0-0-09
50			Kala Gad (46)	MA-0-0-10
51			Nilgad Gad (46)	MA-0-0-11
52			Lasku Khola (40)	MA-0-0-12
53			Thali Gad (37)	MA-0-0-13
54			Nijang Gad (27)	MA-0-0-14
55			Pangkha Gad (27)	MA-0-0-15
56			Jogbuda Nadi (26)	MA-0-0-16
57			Baku Gad (24)	MA-0-0-17
58			Matela Gad (24)	MA-0-0-18
59			Tilkeni Khola (23)	MA-0-0-19
60			Lali Gad (23)	MA-0-0-20
61			Lilinti Khola (22)	MA-0-0-21
62			Kulau Khola (21)	MA-0-0-22

Annex 10: Rivers of Level-2 to Level-4 in West Rapti (Independent) Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Madi Khola (2347)		
3		Lungri Khola (636)	
4			Phagam Khola (137)
5			Ghusbang Khola (127)
6			Bojyang Khola (84)
7			Gaja Khola (66)
8			Judhung Khola (59)
9			Gam Khola (32)
10		Agrang Khola (257)	
11		Sibang Khola (205)	
12		Chiura Khola (197)	
13		Dangdung Khola (123)	
14		Dhangsi Khola (113)	
15		Chunbang Khola (93)	
16		Kochhap Khola (73)	
17		Ghor Khola (45)	
18		Hungri Khola (43)	
19		Bane Khola (30)	
20		Bhiting Khola (25)	
21		Oli Khola (24)	
22	Jhimruk Khola (1038)		
23		Lung Khola (218)	
24		Chhap Khola (150)	
25		Gartang Khola (84)	
26		Jumri Khola (42)	
27		Chhirling Khola (40)	
28		Khar Khola (31)	
29		Chudari Khola (26)	
30		Bangsiri Khola (21)	
31		Kanera Khola (20)	
32	Arjun Khola (233)		
33	Jhijhari Khola (224)		
34	Duduwa Khola (186)		
35	Rangsing Khola (164)		
36	Sit Khola (136)		
37	Ganaha Khola (125)		
38	Syano Khola (116)		
39	Khabri Khola (81)		
40	Muguwa Khola (74)		
41	Moranga Khola (69)		

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
42	Khairi Khola (66)		
43	Rangle Khola (54)		
44	Lomarari Khola (47)		
45	Mahatini Khola (43)		
46	Gurung Khola (43)		
47	Bhaisahi Khola (41)		
48	Simalkota Khola (38)		
49	Sukhar Khola (37)		
50	Khoche Khola (30)		
51	Bhaukahawa Khola (30)		
52	Kharanga Khola (30)		
53	Rihar Khola (29)		
54	Jhuri Khola (28)		
55	Sunpathari Khola (25)		
56	Sikrahawa Khola (23)		
57	Gabar Khola (23)		
58	Lumba Khola (22)		
59	Darbhan Khola (20)		

Annex 11: Details of sub-basins, watersheds and sub-watersheds in the West Rapti (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				WR-I(KA)
2	Madi Khola (2347)			WR-I(KA)-1
3		Lungri Khola (636)		WR-I(KA)-1-1
4			Phagam Khola (137)	WR-I(KA)-1-1-01
5			Ghusbang Khola (127)	WR-I(KA)-1-1-02
6			Bojyang Khola (84)	WR-I(KA)-1-1-03
7			Gaja Khola (66)	WR-I(KA)-1-1-04
8			Judhung Khola (59)	WR-I(KA)-1-1-05
9			Gam Khola (32)	WR-I(KA)-1-1-06
10			Agrang Khola (257)	WR-I(KA)-1-0-01
11			Sibang Khola (205)	WR-I(KA)-1-0-02
12			Chiura Khola (197)	WR-I(KA)-1-0-03
13			Dangdung Khola (123)	WR-I(KA)-1-0-04
14			Dhangsi Khola (113)	WR-I(KA)-1-0-05
15			Chunbang Khola (93)	WR-I(KA)-1-0-06
16			Kochhap Khola (73)	WR-I(KA)-1-0-07
17			Ghor Khola (45)	WR-I(KA)-1-0-08
18			Hungri Khola (43)	WR-I(KA)-1-0-09
19			Bane Khola (30)	WR-I(KA)-1-0-10
20			Bhiting Khola (25)	WR-I(KA)-1-0-11
21			Oli Khola (24)	WR-I(KA)-1-0-12
22	Jhimruk Khola (1038)			WR-I(KA)-2
23			Lung Khola (218)	WR-I(KA)-2-0-01
24			Chhap Khola (150)	WR-I(KA)-2-0-02
25			Gartang Khola (84)	WR-I(KA)-2-0-03
26			Jumri Khola (42)	WR-I(KA)-2-0-04
27			Chhirling Khola (40)	WR-I(KA)-2-0-05
28			Khar Khola (31)	WR-I(KA)-2-0-06
29			Chudari Khola (26)	WR-I(KA)-2-0-07
30			Bangsiri Khola (21)	WR-I(KA)-2-0-08
31			Kanera Khola (20)	WR-I(KA)-2-0-09
32			Arjun Khola (233)	WR-I(KA)-0-0-01
33			Jhijhari Khola (224)	WR-I(KA)-0-0-02
34			Duduwa Khola (186)	WR-I(KA)-0-0-03
35			Rangsing Khola (164)	WR-I(KA)-0-0-04

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
36			Sit Khola (136)	WR-I(KA)-0-0-05
37			Ganaha Khola (125)	WR-I(KA)-0-0-06
38			Syano Khola (116)	WR-I(KA)-0-0-07
39			Khabri Khola (81)	WR-I(KA)-0-0-08
40			Muguwa Khola (74)	WR-I(KA)-0-0-09
41			Moranga Khola (69)	WR-I(KA)-0-0-10
42			Khairi Khola (66)	WR-I(KA)-0-0-11
43			Rangle Khola (54)	WR-I(KA)-0-0-12
44			Lomarari Khola (47)	WR-I(KA)-0-0-13
45			Mahatini Khola (43)	WR-I(KA)-0-0-14
46			Gurung Khola (43)	WR-I(KA)-0-0-15
47			Bhaisahi Khola (41)	WR-I(KA)-0-0-16
48			Simalkota Khola (38)	WR-I(KA)-0-0-17
49			Sukhar Khola (37)	WR-I(KA)-0-0-18
50			Khoche Khola (30)	WR-I(KA)-0-0-19
51			Bhaukahawa Khola (30)	WR-I(KA)-0-0-20
52			Kharanga Khola (30)	WR-I(KA)-0-0-21
53			Rihar Khola (29)	WR-I(KA)-0-0-22
54			Jhuri Khola (28)	WR-I(KA)-0-0-23
55			Sunpathari Khola (25)	WR-I(KA)-0-0-24
56			Sikrahawa Khola (23)	WR-I(KA)-0-0-25
57			Gabar Khola (23)	WR-I(KA)-0-0-26
58			Lumba Khola (22)	WR-I(KA)-0-0-27
59			Darbhan Khola (20)	WR-I(KA)-0-0-28

Annex 12: Rivers of Level-2 to Level-4 in the Bagmati (independent) Basin

[illegible]

Annex 13: Details of sub-basins, watersheds and sub-watersheds in the Bagmati (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				BG-I(KO)
2		Marin Khola (538)		Marin Khola
3			Marin Khola (71)	BG-I(KO)-0-1-01
4			Gaghar Khola (53)	BG-I(KO)-0-1-02
5			Phulbari Khola (29)	BG-I(KO)-0-1-03
6		Kakhajor Khola (355)		Kakhajor Khola
7			Bankhu Khola (105)	BG-I(KO)-0-2-01
8			Chau Khola (58)	BG-I(KO)-0-2-02
9			Rampur Khola (37)	BG-I(KO)-0-2-03
10			Tamajor Khola (29)	BG-I(KO)-0-2-04
11		Jhanjh Nadi (330)		Jhanjh Nadi
12			Lohiniya Khola (153)	BG-I(KO)-0-3-01
13			Gujara Khola (86)	BG-I(KO)-0-3-02
14			Chandi Nala (51)	BG-I(KO)-0-3-03
15			Pathalaiya Nala (264)	BG-I(KO)-0-0-01
16			Manohara Khola (257)	BG-I(KO)-0-0-02
17			Kulekhani Khola (222)	BG-I(KO)-0-0-03
18			Kyan Khola (160)	BG-I(KO)-0-0-04
19			Chandi Khola (155)	BG-I(KO)-0-0-05
20			Chauda Khola (135)	BG-I(KO)-0-0-06
21			Khani Khola (113)	BG-I(KO)-0-0-07
22			Bishnumati Nadi (102)	BG-I(KO)-0-0-08
23			Khani Khola (72)	BG-I(KO)-0-0-09
24			Chiruwa Khola (67)	BG-I(KO)-0-0-10
25			Durlung Khola (63)	BG-I(KO)-0-0-11
26			Nakhu Khola (57)	BG-I(KO)-0-0-12
27			Balkhu Khola (44)	BG-I(KO)-0-0-13
28			Bhabhari Nala (36)	BG-I(KO)-0-0-14
29			Paurai Khola (35)	BG-I(KO)-0-0-15
30			Chamargoda Nala (29)	BG-I(KO)-0-0-16
31			Ekadasi Nala (27)	BG-I(KO)-0-0-17
32			Ipa Khola (26)	BG-I(KO)-0-0-18
33			Dhobi Khola (26)	BG-I(KO)-0-0-19

Annex 14: Rivers of Level-2 to Level-4 in the Babai (independent) Basin

[illegible]

Annex 15: Details of sub-basins, watersheds and sub-watersheds in the Babai (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				BA-I(KA)
2	Sharada Khola (978)			BA-I(KA)-1
3			Luham Khola (93)	BA-I(KA)-1-0-01
4			Mas Khola (71)	BA-I(KA)-1-0-02
5			Jum Khola (71)	BA-I(KA)-1-0-03
6			Korabang Khola (54)	BA-I(KA)-1-0-04
7			Gunta Khola (42)	BA-I(KA)-1-0-05
8			Bhun Khola (40)	BA-I(KA)-1-0-06
9			Makhula Khola (40)	BA-I(KA)-1-0-07
10			Suke Khola (26)	BA-I(KA)-1-0-08
11			Ghatte Khola (24)	BA-I(KA)-1-0-09
12			Dimire Khola (24)	BA-I(KA)-1-0-10
13			Guhar Khola (210)	BA-I(KA)-0-0-01
14			Hapur Khola (137)	BA-I(KA)-0-0-02
15			Patu Khola (117)	BA-I(KA)-0-0-03
16			Bhada Khola (110)	BA-I(KA)-0-0-04
17			Jangawa Khola (88)	BA-I(KA)-0-0-05
18			Katwa Khola (82)	BA-I(KA)-0-0-06
19			Raj Kula (81)	BA-I(KA)-0-0-07
20			Tui Khola (73)	BA-I(KA)-0-0-08
21			Malai Khola (71)	BA-I(KA)-0-0-09
22			Gyang Khola (69)	BA-I(KA)-0-0-10
23			Baula Khola (67)	BA-I(KA)-0-0-11
24			Kalleri Khola (67)	BA-I(KA)-0-0-12
25			Budhi Khola (63)	BA-I(KA)-0-0-13
26			Twang Khola (49)	BA-I(KA)-0-0-14
27			Chire Gad (46)	BA-I(KA)-0-0-15
28			Ratmati Khola (43)	BA-I(KA)-0-0-16
29			Kali Nala (42)	BA-I(KA)-0-0-17
30			Chyati Khola (23)	BA-I(KA)-0-0-18
31			Balim Khola (21)	BA-I(KA)-0-0-19

Annex 16: Rivers of Level-2 to Level-4 in the Kamala (independent) Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Tawa Khola (476)		
3		Baidyanath Khola (114)	
4		Kakur Khola (82)	
5		Maruwa Khola (34)	
6		Chapleti Khola (20)	
7	Chadaha Khola (306)		
8		Jirga Khola (79)	
9		Bhalu Khola (65)	
10		Langur Khola (35)	
11	Suklaha Khola (129)		
12	Thakur Khola (109)		
13	Gwang Khola (99)		
14	Charnath Khola (77)		
15	Selar Khola (64)		
16	Kataniya Khola (55)		
17	Ghulmi Khola (55)		
18	Sarbi Dhar (39)		
19	Belsot Khola (38)		
20	Talakha Khola (38)		
21	Bhedwa Khola (32)		
22	Bichitra Khola (27)		

Annex 17: Details of sub-basins, watersheds and sub-watersheds in the Kamala (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				KM-I(KO)
2		Tawa Khola (476)		KM-I(KO)-0-1
3			Baidyanath Khola (114)	KM-I(KO)-0-1-01
4			Kakur Khola (82)	KM-I(KO)-0-1-02
5			Maruwa Khola (34)	KM-I(KO)-0-1-03
6			Chapleti Khola (20)	KM-I(KO)-0-1-04
7		Chadaha Khola (306)		KM-I(KO)-0-2
8			Jirga Khola (79)	KM-I(KO)-0-2-01
9			Bhalu Khola (65)	KM-I(KO)-0-2-02
10			Langur Khola (35)	KM-I(KO)-0-2-03
11			Suklaha Khola (129)	KM-I(KO)-0-0-01
12			Thakur Khola (109)	KM-I(KO)-0-0-02
13			Gwang Khola (99)	KM-I(KO)-0-0-03
14			Charnath Khola (77)	KM-I(KO)-0-0-04
15			Selar Khola (64)	KM-I(KO)-0-0-05
16			Kataniya Khola (55)	KM-I(KO)-0-0-06
17			Ghulmi Khola (55)	KM-I(KO)-0-0-07
18			Dudhauli Khola (42)	KM-I(KO)-0-0-08
19			Sarbi Dhar (39)	KM-I(KO)-0-0-09
20			Belsot Khola (38)	KM-I(KO)-0-0-10
21			Talakha Khola (38)	KM-I(KO)-0-0-11
22			Bhedwa Khola (32)	KM-I(KO)-0-0-12
23			Bichitra Khola (27)	KM-I(KO)-0-0-13

Annex 18: Rivers of Level-2 to Level-4 in the Kankaimai (independent) Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Kamal Khola (118)		
3	Kankaimai Nadi (59)		
4	Ingla Khola (29)		
5	Karphok Khola (26)		
6	Malu Khola (21)		
7	Dhuwa Khola (20)		
8		Deumai Khola (286)	
9		Puwa Khola (159)	
10		Jogmai Khola (153)	
11		Lodiya Khola (36)	
12		Garuwa Khola (33)	
13		Sya Khola (23)	
14		Satasi Khola (23)	
15		Lal Khola (21)	

Annex 19: Details of sub-basins, watersheds and sub-watersheds in the Kankaimai (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				KN-I(MN)
2			Deumai Khola (286)	KN-I(MN)-0-0-01
3			Puwa Khola (159)	KN-I(MN)-0-0-02
4			Jogmai Khola (153)	KN-I(MN)-0-0-03
5			Kamal Khola (118)	KN-I(MN)-0-0-04
6			Kankaimai Nadi (59)	KN-I(MN)-0-0-05
7			Lodiya Khola (36)	KN-I(MN)-0-0-06
8			Garuwa Khola (33)	KN-I(MN)-0-0-07
9			Ingla Khola (29)	KN-I(MN)-0-0-08
10			Karphok Khola (26)	KN-I(MN)-0-0-09
11			Sya Khola (23)	KN-I(MN)-0-0-10
12			Satasi Khola (23)	KN-I(MN)-0-0-11
13			Malu Khola (21)	KN-I(MN)-0-0-12
14			Lal Khola (21)	KN-I(MN)-0-0-13
15			Dhuwa Khola (20)	KN-I(MN)-0-0-14

Annex 20: Rivers of Level-2 to Level-4 in the Tinau (independent) Basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Dano Nadi (458)		
3		Inguriya Khola (112)	
4		Kanchan Nadi (99)	
5		Siyari Nadi (34)	
6		Sukahi Nadi (32)	
7		Tapaha Khola (30)	
8	Dobhan Khola (178)		
9	Jhumsa Khola (96)		
10	Hulandi Khola (90)		

Annex 21: Details of sub-basins, watersheds and sub-watersheds in the Tinau (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				TI-I(KA)
2		Dano Nadi (458)		Dano Nadi
3			Inguriya Khola (112)	TI-I(KA)-0-1-01
4			Kanchan Nadi (99)	TI-I(KA)-0-1-02
5			Siyari Nadi (34)	TI-I(KA)-0-1-03
6			Sukahi Nadi (32)	TI-I(KA)-0-1-04
7			Tapaha Khola (30)	TI-I(KA)-0-1-05
8			Dobhan Khola (178)	TI-I(KA)-0-0-01
9			Jhumsa Khola (96)	TI-I(KA)-0-0-02
10			Hulandi Khola (90)	TI-I(KA)-0-0-03

Annex 22: Rivers of Level-2 to Level-4 in the Mechi (independent) basin

S.N.	Level 2 (Area, km ²)	Level 3 (Area, km ²)	Level 4 (Area, km ²)
1			
2	Hadiya Khola (228)		
3	Deuniya Khola (147)		
4	Badojhoda Khola (100)		
5	Siddhi Khola (78)		
6	Paliya Khola (39)		

Annex 23: Details of sub-basins, watersheds and sub-watersheds in the Mechi (independent) Basin

S.N.	Sub-basin	Watershed	Sub-watershed	Hydrologic Unit Code
1				ME-I(MN)
2			Hadiya Khola (228)	ME-I(MN)-0-0-01
3			Deuniya Khola (147)	ME-I(MN)-0-0-02
4			Badojhoda Khola (100)	ME-I(MN)-0-0-03
5			Siddhi Khola (78)	ME-I(MN)-0-0-04
6			Paliya Khola (39)	ME-I(MN)-0-0-05

Annex 24: Location of Outlet points (in WGS1984 coordinate system)

S.N.	River Name	River code	X	Y
1	Adhuwa Bairang Khola	S01-0-00-01	87.9369555008	26.4156149162
2	Arra Nala	S51-0-00-01	82.7366761718	27.5157350610
3	Aruwa Nadi	S29-0-00-01	85.1761890687	26.8692429704
4	Ghatte Khola	BA-I(KA)-1-0-09	82.1902726111	28.3904383575
5	Dimire Khola	BA-I(KA)-1-0-10	82.0176477684	28.3049831714
6	Kali Nala	BA-I(KA)-0-0-17	81.4441353436	28.4392137408
7	Chire Gad	BA-I(KA)-0-0-15	82.1613162903	28.0878614282
8	Bhun Khola	BA-I(KA)-1-0-06	82.2305544451	28.3339937909
9	Chyati Khola	BA-I(KA)-0-0-18	82.1128300726	28.1548846498
10	Guhar Khola	BA-I(KA)-0-0-01	82.2701873811	28.0308250171
11	Jangawa Khola	BA-I(KA)-0-0-05	82.3739151887	28.0146379209
12	Jum Khola	BA-I(KA)-1-0-03	81.9227033486	28.3046881261
13	Tui Khola	BA-I(KA)-0-0-08	82.2306099176	28.0457881713
14	Raj Kula	BA-I(KA)-0-0-07	81.3597938417	28.2725380918
15	Budhi Khola	BA-I(KA)-0-0-13	81.3588799401	28.2725022402
16	Twang Khola	BA-I(KA)-0-0-14	82.0857756634	28.1595083599
17	Gyang Khola	BA-I(KA)-0-0-10	81.3716974090	
18	Gunta Khola	BA-I(KA)-1-0-05	82.1499730437	28.2794848947
19	Bhada Khola	BA-I(KA)-0-0-04	81.3766496991	28.2486776435
20	Hapur Khola	BA-I(KA)-0-0-02	82.3169379621	28.0357261083
21	Balim Khola	BA-I(KA)-0-0-19	82.4991721166	27.9709736422
22	Korabang Khola	BA-I(KA)-1-0-04	82.2426648436	28.3086529739
23	Luham Khola	BA-I(KA)-1-0-01	82.2580715826	28.2926873370
24	Makhula Khola	BA-I(KA)-1-0-07	82.2625806332	28.4180858663
25	Malai Khola	BA-I(KA)-0-0-09	82.0327789700	28.1784154941
26	Mas Khola	BA-I(KA)-1-0-02	82.0867737070	28.2764377430
27	Baula Khola	BA-I(KA)-0-0-11	82.1146081605	28.1219932513
28	Katwa Khola	BA-I(KA)-0-0-06	82.4588543630	27.9794066669
29	Patu Khola	BA-I(KA)-0-0-03	82.1955773788	28.0731370587
30	Ratmati Khola	BA-I(KA)-0-0-16	81.5097829192	28.4302965824
31	Sharada Khola	BA-I(KA)-1	81.9048435444	28.2632375680
32	Kalleri Khola	BA-I(KA)-0-0-12	81.9465560328	28.2580441782
33	Suke Khola	BA-I(KA)-1-0-08	82.1961666191	28.3655069575
34	Babai Nadi	BA-I(KA)	81.3731653396	28.1758635954
35	Gagan Nadi	S21-0-01-01	86.2149514116	26.5900976909
36	Badahar Nadi	S21-0-01	86.2143141357	26.5893961393
37	Badojhoda Khola	ME-I(MN)-0-0-03	88.0298160007	26.3654232765
38	Nakhu Khola	BG-I(KO)-0-0-12	85.2970981505	27.6631231736
39	Marin Khola	BG-I(KO)-0-1-01	85.8733084596	27.2834137751
40	Marin Khola	BG-I(KO)-0-1	85.5048336347	27.2222446638
41	Pathalaiya Nala	BG-I(KO)-0-0-01	85.3333640924	26.7619079165

S.N.	River Name	River code	X	Y
42	Chandi Nala	BG-I(KO)-0-3-03	85.3142813891	26.9251027328
43	Chamargoda Nala	BG-I(KO)-0-0-16	85.3383386072	26.8365186973
44	Chau Khola	BG-I(KO)-0-2-02	85.5045204967	27.3701477225
45	Bagmati Nadi	BG-I(KO)	85.3351909582	26.7427762535
46	Balkhu Khola	BG-I(KO)-0-0-13	85.2982794886	27.6830835200
47	Bankhu Khola	BG-I(KO)-0-2-01	85.6293006071	27.3477912557
48	Kakhajor Khola	BG-I(KO)-0-2	85.4727089046	27.3701512489
49	Chauda Khola	BG-I(KO)-0-0-06	85.4151483400	27.3250200324
50	Chiruwa Khola	BG-I(KO)-0-0-10	85.4878166421	27.2199327301
51	Bishnumati Nadi	BG-I(KO)-0-0-08	85.3015450147	27.6918423173
52	Bhabhari Nala	BG-I(KO)-0-0-14	85.3448353898	26.8632091162
53	Paurai Khola	BG-I(KO)-0-0-15	85.4512498898	27.1033190813
54	Chandi Khola	BG-I(KO)-0-0-05	85.3856179175	27.0169823988
55	Phulbari Khola	BG-I(KO)-0-1-03	85.7122058001	27.2568837796
56	Gaghar Khola	BG-I(KO)-0-1-02	85.7947663608	27.2488594401
57	Dhobi Khola	BG-I(KO)-0-0-19	85.3247393309	27.6871078587
58	Gujara Khola	BG-I(KO)-0-3-02	85.3137673347	26.9623094486
59	Ipa Khola	BG-I(KO)-0-0-18	85.2338679852	27.5038431346
60	Lohiniya Khola	BG-I(KO)-0-3-01	85.3146717113	26.9616999245
61	Kyan Khola	BG-I(KO)-0-0-04	85.5032022857	27.1747794626
62	Jhanjh Nadi	BG-I(KO)-0-3	85.3253798385	26.8147191625
63	Khani Khola	BG-I(KO)-0-0-07	85.2548469948	27.4712562906
64	Ekadasi Nala	BG-I(KO)-0-0-17	85.3960301819	26.8938201846
65	Durlung Khola	BG-I(KO)-0-0-11	85.4184870263	27.4092014154
66	Khani Khola	BG-I(KO)-0-0-09	85.4786955766	27.3782631671
67	Kulekhani Khola	BG-I(KO)-0-0-03	85.2306348635	27.5371234479
68	Tamajor Khola	BG-I(KO)-0-2-04	85.7243916428	27.3382087248
69	Manohara Khola	BG-I(KO)-0-0-02	85.3340176033	27.6783412000
70	Rampur Khola	BG-I(KO)-0-2-03	85.7237392591	27.3385667517
71	Nunsari Khola	S06-0-01-01	87.6186693643	26.6747484941
72	Solti Khola	S06-0-01-02	87.6053527852	26.6505121709
73	Kajala Nala	S06-0-01-04	87.6052811042	26.4107695832
74	Bakara Nuna Nadi	S06-0-01	87.5877451190	26.3903764384
75	Katnu Nala	S06-0-01-03	87.5791296123	26.4595349276
76	Chisang Khola	S07-0-01-01	87.4754455938	26.4602182794
77	Das Khola	S07-0-01-02	87.5278269151	26.5344877225
78	Cheka Khola	S07-0-01-03	87.4663853904	26.4436733138
79	Mariya Bakraha Khola	S07-0-01-04	87.5284814370	26.5345139650
80	Bakraha Nadi	S07-0-01	87.4636765924	26.4399252914
81	Balan Khola	S18-0-01-04	86.5258090552	26.7828995947
82	Chahaka Khola	S18-0-01-01	86.5206357464	26.7403372576

S.N.	River Name	River code	X	Y
83	Mutani Nadi	S18-0-01-05	86.5070420333	26.7319104483
84	Jhirari Khola	S18-0-01-03	86.5136843299	26.7940016452
85	Balan Nadi	S18-0-01	86.4855046750	26.5502906118
86	Khutti Nadi	S18-0-01-02	86.5031696061	26.7196424751
87	Bel Khola	S49-0-01-02	82.9681205660	27.5956689606
88	Ghorahi Nala	S49-0-01-04	83.0219152070	27.5725737088
89	Kaila Khola	S49-0-01-03	83.1158244820	27.6727043986
90	Belwa Gurudwa Khola	S49-0-01-01	82.9684926317	27.5964931953
91	Balhor Dundra	S49-0-01-06	83.0746435789	27.6271624677
92	Dhungre Khola	S49-0-01-05	83.2093817980	27.8137567154
93	Banaganga Nadi	S49-0-01	82.9571555980	27.4671637283
94	Bangari Nadi	S32-0-00-01	84.9089163294	26.9683483752
95	-	S22-0-01-06	85.9120812331	26.8131676378
96	Aurahi Khola	S22-0-01-03	85.9454099372	26.8643161024
97	Bigahi Nadi	S22-0-01-05	85.8827391655	26.7866974378
98	Sukhajor Nadi	S22-0-01-04	85.9442698568	26.8647948718
99	Jamuni Nadi	S22-0-01-01	85.8519756728	26.5723492568
100	Bigahi Nadi	S22-0-01	85.8484697324	26.5701722626
101	Ghagar Nadi	S22-0-01-02	85.8524605321	26.6156454673
102	Bihul Nadi	S17-0-00-01	86.5543416980	26.5169706847
103	Surunga Khola	S02-0-01-03	87.9009775642	26.5557050617
104	Tangting Khola	S02-0-01-01	87.9449346741	26.6623724603
105	Ghagara Khola	S02-0-01-02	87.9172178110	26.5024817341
106	Biring Nadi	S02-0-01	87.9257448126	26.4424821422
107	Tenggra Khola	S10-0-01-02	87.2682744294	26.5506821540
108	Gachhiya Khola	S10-0-01-01	87.3010015060	26.6312497121
109	Budhi Nadi	S11-0-00-01	87.1879762216	26.4144523112
110	Budhi Khola	S10-0-01	87.2393707127	26.4141268380
111	Mugu Khola	S10-0-01-03	87.3133520829	26.7015117722
112	Bahuni Khola	S55-0-01-01	80.2169165572	28.7810928070
113	Chaudara Nadi	S55-0-01	80.2141869460	28.7568605853
114	Amkhaiya Nala	S55-0-01-05	80.2551698262	28.8373989892
115	Champa Nadi	S55-0-01-04	80.2481788604	28.9156474644
116	Saj Khola	S55-0-01-02	80.2549656560	28.9539572418
117	Sukha Khola	S55-0-01-03	80.2291889344	28.8967792375
118	Rautela Khola	S55-0-01-06	80.2387506132	28.9143518270
119	Chitaha Khola	S41-0-00-01	84.6103796326	27.3366825121
120	Doda Nadi	S54-0-01	80.5152823306	28.5972584416
121	Gajar Khola	S54-0-01-03	80.5478182051	28.9581207034
122	Banhara Nadi	S54-0-01-02	80.3776561077	28.8153955104
123	Kharra Nala	S54-0-01-06	80.4030163827	28.7434619835

S.N.	River Name	River code	X	Y
124	Sisne Nala	S54-0-01-07	80.4509901879	28.8732132992
125	Machheli Khola	S54-0-01-05	80.5482150517	28.9573367204
126	Syali Nadi	S54-0-01-01	80.3640682258	28.7737500911
127	Lamniya Nala	S54-0-01-04	80.5027471539	28.6620298434
128	Gad Nadi	S35-0-00-01	84.7919361726	27.0128897826
129	Gairhawa Nadi	S46-0-00-01	83.2934793740	27.3351829989
130	Chilungpa Khola	GA-1-0-02	83.7922161099	28.8772469399
131	Chipli Khola	GA-6-1-11	84.0877585190	28.3200250372
132	Chokhopani Khola	GA-1-0-45	83.6593831036	28.7151595906
133	Chaurban Khola	GA-1-2-07	83.4256876508	28.6861438907
134	Chhomrong Khola	GA-1-3-06	83.8302270182	28.4213171056
135	Kothi Khola	GA-1-0-21	84.0968755406	27.8575764184
136	Charang Khola	GA-1-0-08	83.9414327516	29.0735678238
137	Chhabdi Khola	GA-6-0-19	84.2766755747	27.9649125328
138	Buldi Khola	GA-6-0-08	84.2741534033	27.9678532999
139	Bijayapur Khola	GA-6-0-07	84.0375633950	28.1562743387
140	Midim Khola	GA-6-1-01	84.2221919040	28.1505040769
141	Bhurungdi Khola	GA-1-3-01	83.7739079832	28.3094446302
142	Bhuji Khola	GA-1-1-05	83.1607941191	28.3377966073
143	Chhaldi Khola	GA-1-1-01	83.3215928341	28.1198177335
144	Khalte Khola	GA-6-1-09	84.2253393195	28.0983173836
145	Hugdi Khola	GA-1-1-06	83.3519963436	28.0654810190
146	Gurusangba Khola	GA-1-0-35	83.6022598624	28.6756723666
147	Kathe Khola	GA-1-0-14	83.6173522540	28.2539701834
148	Lamahe Khola	GA-1-0-26	83.6376835228	28.1481485493
149	Labdi Khola	GA-1-1-09	83.2379464095	28.2211842650
150	Kyangdi Khola	GA-6-0-04	84.0846673300	28.0094532317
151	Kyadusyo Khola	GA-6-1-12	84.1143125580	28.4218176559
152	Kurung Khola	GA-1-0-38	83.4764441081	27.9251835799
153	Kotre Khola	GA-6-0-03	84.0802581540	28.0922159107
154	Keduwa Khola	GA-1-4-02	83.2930126464	27.9502805870
155	Kimrong Khola	GA-1-3-04	83.8254985438	28.4053965695
156	Dang Khola	GA-1-2-09	83.3834314676	28.4341374599
157	Rigdi Khola	GA-0-0-06	84.4969104996	27.8203855585
158	Doba Khola	GA-1-0-51	83.6327146776	28.4713750694
159	Sangle Khola	GA-3-0-16	84.8993785973	28.3445570598
160	Soti Khola	GA-4-1-03	84.2412118767	28.5929684519
161	Sarpu Khola	GA-3-2-02	85.0104605277	28.4755974670
162	Sarti Khola	GA-3-2-07	84.9301845540	28.4454299849
163	Serang Khola	GA-3-0-20	84.7897664025	28.5329081137
164	Serang Khola	GA-3-0-11	84.8561729894	28.5103760737

S.N.	River Name	River code	X	Y
165	Sindhure Khola	GA-2-1-03	85.1698690455	27.8894704324
166	Richet Khola	GA-3-0-13	84.8822830822	28.1705927357
167	Rangrung Khola	GA-4-2-03	84.7175339704	28.1888191551
168	Samari Khola	GA-2-0-13	85.1382468754	27.9173249289
169	Phujel Khola	GA-3-0-24	84.7320967291	27.9269240897
170	Phu Khola	GA-4-1-01	84.2294929262	28.6700617477
171	Phaudi Khola	GA-4-0-17	84.4612260848	28.0377737510
172	Phalakhu Khola	GA-2-0-06	85.1854535217	27.9742762596
173	Phache Khola	GA-4-0-20	83.9072061264	28.6796821250
174	Paudi Khola	GA-4-0-09	84.4312445579	28.1112115917
175	Sonam Glacier	GA-3-0-23	84.6347165899	28.6424122390
176	Phurhung Khola	GA-3-2-05	85.1124597736	28.5804756636
177	Salakhu Khola	GA-2-0-10	85.1799082981	27.9816749547
178	Sabje Khola	GA-4-0-12	84.0750351531	28.6469140618
179	Dungre Khola	GA-1-0-31	84.1217455013	27.8470456178
180	Jhong Khola	GA-1-0-17	83.7823103305	28.8371774829
181	-	GA-1-2-06	83.4613934105	28.7416812725
182	Dar Khola	GA-1-2-03	83.3486753683	28.4995458888
183	Dihul Khola	GA-6-0-10	84.3141535755	27.9099354226
184	Dhingkyo Khola	GA-1-0-46	83.7995508285	28.8870502097
185	Dhechyang Khola	GA-1-0-04	83.9422986887	29.0726892760
186	Dhand Khola	GA-6-0-09	84.3464730912	27.8779757756
187	Deusat Khola	GA-1-0-33	84.1703030193	27.8454996537
188	Darling Khola	GA-1-1-08	83.1771617084	28.2807134132
189	Daram Khola	GA-1-1-02	83.2741710245	28.1879198297
190	Narsing Khola	GA-1-0-15	83.8167898059	28.9173083878
191	Nisi Khola	GA-1-1-03	83.1586258002	28.3212473414
192	Samno Khola	GA-3-0-17	84.8933219309	28.2674228773
193	Ghar Khola	GA-1-0-19	83.6478852576	28.4843525463
194	Idi Khola	GA-6-1-10	84.1071887457	28.2226353270
195	Modi Khola	GA-1-3	83.6681927632	28.2024552306
196	Singkos Khola	GA-1-2-08	83.3857613638	28.5556934268
197	Bagali Khola	GA-1-4-05	83.2939380823	27.9246304987
198	-	GA-1-1-12	83.4115449771	28.0338374176
199	Dhami Khola	GA-1-0-06	83.9041948284	29.0101107383
200	Karaudi Khola	GA-1-0-54	83.7360776004	27.9039117453
201	Barandi Khola	GA-1-0-47	83.5277883113	27.9292072646
202	Yangdi Khola	GA-6-0-15	83.9691455124	28.2519407976
203	Sisne Khola	GA-1-4-03	83.2817424784	27.9257233829
204	Ritung Khola	GA-1-2-04	83.3814681649	28.4137304595
205	Arje Khola	GA-1-2-10	83.5039771574	28.3644629138

S.N.	River Name	River code	X	Y
206	Puyung Khola	GA-1-0-25	83.9734677542	29.1013249850
207	Pongkyu Khola	GA-1-0-32	83.6922164758	28.7516318483
208	Bardi Khola	GA-6-1-08	84.1545966511	28.2118309920
209	Beg Khola	GA-1-0-52	83.5999324730	28.4324323904
210	Theule Khola	GA-1-0-18	83.6393435051	28.1745549187
211	Thini Khola	GA-1-0-20	83.7144379561	28.7722310520
212	Aul Khola	GA-1-0-43	83.5999685535	28.4056679006
213	Thapa Khola	GA-1-0-24	83.6278517267	28.7002475035
214	Tangge Khola	GA-1-0-09	83.9165407376	29.0271253779
215	Taman Khola	GA-1-1-04	83.1611592312	28.3374687515
216	Tama Khola	GA-1-0-40	83.8712940863	28.9835010495
217	Syang Khola	GA-1-0-27	83.7131063059	28.7719887560
218	Sisne Khola	GA-1-1-10	83.3673062153	28.0512938050
219	Badigad Khola	GA-1-1	83.4705278014	27.9673362302
220	Pirung Khola	GA-6-0-13	84.1151559311	27.9710378062
221	Rupse Khola	GA-1-0-50	83.6373056480	28.5562927077
222	Rudi Khola	GA-6-1-02	84.1936667025	28.1982765244
223	Bhaise Khola	GA-1-4-06	83.3941119153	27.9432794436
224	Risti Khola	GA-6-1-05	84.2334304029	28.0783042716
225	Ridi Khola	GA-1-4	83.4427368455	27.9372334653
226	Raughat Khola	GA-1-0-05	83.5696883036	28.3747620879
227	Betini Khola	GA-1-0-29	83.5606720212	28.0638196003
228	Sadhu Khola	GA-6-0-16	83.9952767609	28.4333527206
229	Bhim Khola	GA-1-1-07	83.1776209448	28.2746843684
230	Kali Khola	GA-6-0-12	83.9947963801	28.2307503104
231	Kali Gandaki Nadi	GA-1	84.4222491183	27.7416287912
232	Kalesti Khola	GA-6-1-07	84.2583977802	28.0259798127
233	Kachi Khola	GA-1-4-01	83.2161887157	27.9471343447
234	Jyagdi Khola	GA-1-0-12	83.8766815109	27.8891467647
235	Jyagdi Khola	GA-6-0-17	84.0999381691	27.9753818534
236	Jwala Khola	GA-1-0-41	84.1626954618	27.8457297791
237	Jumdi Khola	GA-1-1-11	83.4364175528	28.0173226468
238	Rati Khola	GA-1-3-03	83.7139463377	28.2308810861
239	Sangboche Khola	GA-1-0-37	83.8339158687	28.9627847651
240	Phurse Khola	GA-1-0-39	83.5875114269	28.3247350364
241	Phulmadi Khola	GA-1-0-49	84.1699094008	27.8457765345
242	Amaka Khola	GA-1-0-53	83.9891685859	29.1270546203
243	Ramdi Khola	GA-1-0-28	83.6353273371	27.8998661874
244	Pati Khola	GA-1-3-05	83.7374944709	28.2708790597
245	Parung Khola	GA-1-0-10	84.0005795137	29.1567425051
246	Alaiche Khola	GA-1-0-48	84.0701451952	27.8634803550

S.N.	River Name	River code	X	Y
247	Pangpu Khola	GA-1-0-30	83.6191485546	28.6306660919
248	Pandur Khola	GA-1-0-42	83.5931956941	28.3914551170
249	Panda Khola	GA-1-0-22	83.7622195055	28.8037676349
250	Palung Khola	GA-1-0-34	83.5800340385	28.0774016165
251	Samarkyung Khola	GA-1-0-36	83.8297732423	28.9499407318
252	East Seti Nadi	GA-6	84.4522771211	27.8209937775
253	Seti Khola	GA-6-0-14	84.0168839740	28.4933233341
254	Seti Khola	GA-1-0-13	83.6054518807	28.0060187962
255	Sardi Khola	GA-6-0-11	83.9601899115	28.3391969323
256	Saraudi Khola	GA-6-0-05	84.0641582850	28.0631583623
257	Sange Khola	GA-6-1-03	84.2595930739	27.9807681686
258	Phusre Khola	GA-6-0-01	84.0093320312	28.1621797169
259	Kunaban Khola	GA-1-2-02	83.3935237895	28.6309349416
260	Mudi Khola	GA-1-2-01	83.3569407766	28.5154173129
261	Mristi Khola	GA-1-0-07	83.6577381452	28.5117747596
262	Mathura Khola	GA-1-4-04	83.2160079458	27.9478949622
263	Mardi Khola	GA-6-0-02	83.9318348713	28.2937909647
264	Marang Khola	GA-1-2-05	83.3827954567	28.4606292141
265	Malyangdi Khola	GA-1-3-07	83.6735839607	28.2015242832
266	Maldi Khola	GA-1-0-16	83.9403148513	27.8781340624
267	Magar Khola	GA-1-0-44	84.3234132385	27.7522805033
268	Madme Khola	GA-6-1-06	84.1157749935	28.4224217053
269	Madkyu Khola	GA-6-1-04	84.1244285495	28.3657691659
270	Lumdi Khola	GA-1-0-23	84.1419511320	27.8501806698
271	Lima Khola	GA-6-0-18	84.2233549641	27.9519996512
272	Khahare Khola	GA-0-0-12	84.2579363284	27.6669741670
273	Deusat Khola	GA-0-0-07	84.1855492975	27.6409794377
274	Daraundi Nadi	GA-4-2	84.5449220625	27.9044265525
275	Darkhu Khola	GA-2-1-04	85.3014131077	27.9181000016
276	Dobhan Khola	GA-3-0-05	84.9055048177	28.2964975445
277	Madi Nadi	GA-6-1	84.2679846418	27.9696548006
278	Nhichung Khola	GA-1-0-03	83.9996195424	29.1572230036
279	Khakara Khola	GA-0-1-02	83.7817296830	27.6760913506
280	Kisede Khola	GA-5-0-15	85.0410122940	27.4663100334
281	Bhalu Khola	GA-3-0-08	84.8931556937	28.3528784523
282	Lothar Khola	GA-5-0-04	84.7102847894	27.5623249374
283	Manahari Khola	GA-5-0-02	84.7949770753	27.5238468030
284	Mandu Khola	GA-5-0-22	85.1053661005	27.5348887088
285	Okhai Khola	GA-5-0-21	85.0475476381	27.5087001800
286	Pantale Khola	GA-5-0-14	84.9347605047	27.4517509134
287	Ban Khola	GA-0-0-15	84.1386251505	27.6110333152

S.N.	River Name	River code	X	Y
288	NULL	GA-1-3-02	83.9100607679	28.5294691936
289	Myagde Khola	GA-6-0-06	84.0861774536	28.0004136847
290	Myagdi Khola	GA-1-2	83.5679557459	28.3399171576
291	Adhi Khola	GA-1-0-01	83.5814147239	27.9787728515
292	Maiga Khola	GA-5-0-17	84.7747370457	27.5249181468
293	Dordi Khola	GA-4-0-02	84.4448744131	28.1636512963
294	Gandak Khani Khola	GA-3-1-03	85.0478877853	28.1668475356
295	Chhilung Khola	GA-3-0-02	84.8954817267	28.4305767044
296	Chilime Khola	GA-2-0-02	85.3424024225	28.1815453464
297	China Khola	GA-4-0-18	84.3347990761	28.5343899861
298	Chopche Khola	GA-2-2-03	85.3693395758	28.1510754370
299	Dangre Khola	GA-0-1-01	83.8634375002	27.6502832168
300	Langdang Khola	GA-3-2-01	85.0053129849	28.4717679816
301	Dhungre Khola	GA-5-0-07	84.4921109782	27.5784962644
302	Kerunga Ghol	GA-5-0-08	84.2794250815	27.5636986510
303	Chhargandi Khola	GA-3-0-22	84.7373972695	27.8969239798
304	Karra Khola	GA-5-0-05	85.0072202952	27.4208521335
305	Kanaha Khola	GA-0-0-04	83.9410963716	27.4818280557
306	Jyamire Khola	GA-0-1-04	83.8873500650	27.5642918412
307	Jayasri Khola	GA-0-0-13	84.3618328904	27.6996019908
308	Harda Khola	GA-5-0-09	84.6846694370	27.5624127027
309	Dumarsot Khola	GA-5-0-23	84.5192325526	27.5452201580
310	Gadar Khola	GA-0-0-02	83.9956743943	27.5614324717
311	Gindri Khola	GA-0-0-05	84.1144834999	27.5888395835
312	Katle Khola (Hasta Khola)	GA-5-0-18	84.7042871066	27.5581519670
313	Chhahare Khola	GA-4-0-13	84.3941870772	28.4342024733
314	Ganesh Kunda Khola	GA-2-2-06	85.4222724482	28.1566994612
315	Gangapurna Khola	GA-4-0-11	84.0187569021	28.6648142861
316	Beldiya Khola	GA-0-0-10	84.2706338527	27.6557728151
317	Betari Khola	GA-5-0-13	84.2017135906	27.5691995814
318	Binayi Khola	GA-0-1	83.9215466478	27.5491806883
319	Caunra Khola	GA-5-0-19	84.8489950418	27.4933729802
320	Dandjor Nadi	GA-0-0-03	83.9992337263	27.5614539007
321	Dana Khola	GA-4-0-07	84.3593153334	28.5167901847
322	Khageri Khola	GA-5-0-03	84.4723055082	27.5762329418
323	Chudi Khola	GA-4-0-08	84.4217441794	27.9563523065
324	Bhotekoshi Nadi	GA-2-0-01	85.3430803341	28.1814825464
325	Bhusundi Khola	GA-4-2-04	84.5817822407	28.0146459202
326	Bhyaure Khola	GA-2-0-14	85.0621513833	27.8590782976
327	Budhi Gandaki Nadi	GA-3	84.7825963562	27.8148293399

S.N.	River Name	River code	X	Y
328	Chaichangwa Khola	GA-4-0-15	84.1467230031	28.6166140226
329	Chake Khola	GA-2-1-02	85.3777356330	27.9224926270
330	Changmam Khola	GA-3-2-03	85.1060918300	28.6087131850
331	Charaundi Khola	GA-0-0-09	84.7503532426	27.8045234850
332	Dudh Khola	GA-4-0-01	84.3563387800	28.5239879870
333	Reu Khola	GA-5-0-01	84.1710861413	27.5548571171
334	Khahare Khola	GA-0-1-05	83.9193303420	27.5634177118
335	Badel Khola	GA-5-0-11	84.5862987298	27.5626306523
336	Nimrung Khola	GA-3-0-12	84.8832000000	28.2531083270
337	Belkot Khola	GA-2-1-05	85.1468538612	27.8751307718
338	Khare Khola	GA-2-1-07	85.2490523371	27.9100745294
339	Likhu Khola	GA-2-1-01	85.2172542189	27.8973598910
340	Ludi Khola	GA-4-2-02	84.5590038971	27.9389814319
341	Khar Khola	GA-4-2-01	84.5452149222	27.9565434061
342	Jarang Khola	GA-4-2-06	84.6509520904	28.0536371674
343	Lansisa Glacier	GA-2-2-01	85.6752866770	28.2139297021
344	Chepe Khola	GA-4-0-03	84.4779728739	28.0582120398
345	-	GA-2-2-05	85.6366171172	28.1995655773
346	Jyadul Khola	GA-3-0-10	84.7391942907	27.9409887500
347	Julu Khola	GA-4-0-14	84.0859854343	28.6445666060
348	Khol Khola	GA-4-2-07	84.5657921305	27.9770963584
349	Khudi Khola	GA-4-0-06	84.3596982376	28.2792965282
350	Kintang Khola	GA-3-1-04	84.9649478263	28.0308972245
351	Samari Khola	GA-5-0-06	85.0412386263	27.4558610273
352	Tadi Khola	GA-2-1	85.1066073899	27.8588789090
353	Akhu Khola	GA-3-1	84.7713728200	27.9678630710
354	Syar Khola	GA-3-2	84.9010914784	28.4413640081
355	Akhu Khola	GA-3-1-05	85.0084830366	28.0877097671
356	Aphal Khola	GA-3-1-06	84.9819890940	28.0697618347
357	Athahra Saya Khola	GA-3-0-14	84.6303717416	28.6879522729
358	Baguwa Khola	GA-3-1-09	84.9274626120	28.0186580379
359	Larke Khola	GA-3-0-06	84.6259848863	28.6544913857
360	Lapang Khola	GA-3-1-07	84.9208239105	28.0063570537
361	Kolpu Khola	GA-2-0-05	85.0140111519	27.8090541388
362	Yaru Khola	GA-3-0-07	84.9066583096	28.3280179274
363	Yangdol Khola	GA-3-2-04	85.1075773803	28.6090242002
364	Udilung Khola	GA-3-2-06	84.9433217927	28.4645306740
365	Trishuli Khola	GA-2-0-11	85.2983402226	28.1273988957
366	Tom (dogni) Khola	GA-3-0-01	84.8063211907	28.5349470884
367	Thorang Khola	GA-4-0-05	84.0069995580	28.6697293107
368	Thopal Khola	GA-2-0-04	84.8354333000	27.8142970714

S.N.	River Name	River code	X	Y
369	Tendrang Khola	GA-3-0-19	84.7849152922	27.9862672419
370	Tatopani (ilep) Khola	GA-3-1-02	85.0711502278	28.1915715907
371	Tardi Khola	GA-4-0-21	84.4409495732	28.1368129135
372	Koshi Khola	GA-2-0-12	85.0216575957	27.8354775252
373	Langtang Khola	GA-2-2	85.3402866502	28.1641542795
374	Kuntung Khola	GA-2-1-06	85.4023184681	27.9605359304
375	Machha Khola	GA-3-0-04	84.8746476824	28.2303548284
376	Gyalma Khola	GA-3-0-26	84.7659160757	27.8581083136
377	Hahang Khola	GA-3-1-08	85.0081277549	28.1166603364
378	Hudi Khola	GA-4-2-05	84.6708238803	28.1151517466
379	Belkhu Khola	GA-2-0-09	84.9482129300	27.8149385914
380	Hinang Khola	GA-3-0-03	84.7367180080	28.5646581160
381	Langtang Glacier	GA-2-2-04	85.6548892726	28.2030805136
382	Twangra Khola	GA-5-0-20	84.9051673561	27.4610368061
383	Shobhapur Khola	GA-5-0-16	84.5422140141	27.5464268719
384	Stamai Ghol	GA-5-0-10	84.3631327059	27.5663823963
385	Sunai Khola	GA-0-1-03	83.8646296215	27.6497034940
386	Pancha Nadi	GA-0-0-11	83.9469720032	27.4422945610
387	East Rapti Nadi	GA-5	84.1574099384	27.5632318896
388	Narayani (Sapta Gandaki) Nadi	GA	83.8527110689	27.3547317592
389	Arung Khola	GA-0-0-01	83.9717185936	27.5581739351
390	Sarakari Ghol	GA-5-0-12	84.3549145084	27.5672802434
391	Mahesh Khola	GA-2-0-03	85.0011213561	27.8016523676
392	Labse Khola	GA-4-1-02	84.2285276321	28.6703119923
393	Laja Khola	GA-2-2-02	85.5527141983	28.2105168596
394	Judhi Khola	GA-0-0-14	84.6312787665	27.8699416816
395	Istul Khola	GA-3-0-09	84.8099043713	28.0397925447
396	Pungen Glacier	GA-3-0-15	84.6670867150	28.5784423604
397	Menchet Khola	GA-3-1-01	85.0718429127	28.1914833839
398	Nisdi Khola	GA-1-0-11	83.9450394424	27.8709805736
399	Maltung Khola	GA-2-0-07	85.2079599410	28.0717767944
400	Mangpang Khola	GA-3-0-18	84.8224745185	28.0642916313
401	Maste Khola	GA-3-0-21	84.7400490251	27.9412851911
402	Marsyangdi Nadi	GA-4	84.5571424302	27.8491964579
403	Ghatte Khola	GA-4-1-04	84.2307521278	28.6615552919
404	Ghatte Khola	GA-4-0-19	84.2424469905	28.5518068249
405	Malekhu Khola	GA-2-0-08	84.8359006585	27.8078283250
406	Ghatta Khola	GA-3-0-25	84.8917838741	28.3863042418
407	Nar Khola	GA-4-1	84.2594092610	28.5543218626
408	Nadi Khola	GA-4-0-04	84.4011662695	28.3131291320

S.N.	River Name	River code	X	Y
409	Myaldi Khola	GA-4-0-10	84.3736029779	28.4542032595
410	-	GA-4-0-16	84.1883121341	28.5720524448
411	Hugdi Khola	GA-0-0-08	84.6970867070	27.8079484035
412	Gauriya Khola	S04-0-00-01	87.7221585580	26.4177201680
413	Ghonghi Nadi	S45-0-00-01	83.2955583953	27.3335939434
414	Ghordaha Nadi	S15-0-00-01	86.7033070609	26.4370626715
415	Hardi Nadi	S25-0-00-01	85.6800956086	26.8442761394
416	Skhaura Khola	S43-0-01-02	83.7018861209	27.4705245717
417	Pusaha Khola	S43-0-01-04	83.6787954875	27.5528468652
418	Dhanewa Nadi	S43-0-01-01	83.7261607112	27.4302228466
419	Bhaluhi Khola	S43-0-01-03	83.6931782283	27.4895156237
420	Jharahi-Bhaluhi Nadi	S43-0-01	83.7265507073	27.4182400660
421	Jhim Nadi	S26-0-00-01	85.5723982443	26.8579573326
422	Kajara Dhar	S16-0-00-01	86.6318911797	26.4650815810
423	Kamala Nadi	KM-I(KO)	86.1511044264	26.6098431616
424	Sarbi Dhar	KM-I(KO)-0-0-09	86.1543344181	26.6245455108
425	Kataniya Khola	KM-I(KO)-0-0-06	86.1966377289	26.7163782913
426	Ghulmi Khola	KM-I(KO)-0-0-07	86.1883184328	26.7222813813
427	Baidyanath Khola	KM-I(KO)-0-1-01	86.4162099553	26.9380659963
428	Bhalu Khola	KM-I(KO)-0-2-02	86.1150834434	27.1174638760
429	Belsot Khola	KM-I(KO)-0-0-10	86.2429364617	26.9066212072
430	Chadaha Khola	KM-I(KO)-0-2	86.0050985140	27.0841960380
431	Bhedwa Khola	KM-I(KO)-0-0-12	86.1526977676	26.8517917408
432	Bichitra Khola	KM-I(KO)-0-0-13	86.1444964841	27.0235980514
433	Langur Khola	KM-I(KO)-0-2-03	86.0845028989	27.1140922511
434	Talakha Khola	KM-I(KO)-0-0-11	86.2552173305	26.9838765621
435	Charnath Khola	KM-I(KO)-0-0-04	86.1497012523	26.8408265129
436	Dudhauri Khola	KM-I(KO)-0-0-08	86.2841150055	26.9499003126
437	Chapleti Khola	KM-I(KO)-0-1-04	86.4841541231	26.9897311997
438	Gwang Khola	KM-I(KO)-0-0-03	85.9004294595	27.1668759694
439	Jirga Khola	KM-I(KO)-0-2-01	86.0245841229	27.1406955011
440	Kakur Khola	KM-I(KO)-0-1-02	86.3529436069	26.9624284415
441	Maruwa Khola	KM-I(KO)-0-1-03	86.3542425529	26.9621087755
442	Selar Khola	KM-I(KO)-0-0-05	86.1484136750	26.9325793343
443	Suklaha Khola	KM-I(KO)-0-0-01	86.1725598961	26.7506414588
444	Tawa Khola	KM-I(KO)-0-1	86.2838351604	26.9493608909
445	Thakur Khola	KM-I(KO)-0-0-02	86.2160014422	27.0057611039
446	Garuwa Khola	KN-I(MN)-0-0-07	87.8771073020	26.7462806700
447	Karphok Khola	KN-I(MN)-0-0-09	87.9156443625	26.8647301683
448	Malu Khola	KN-I(MN)-0-0-12	87.9629522428	26.9673595934
449	Lodiya Khola	KN-I(MN)-0-0-06	87.8664972612	26.7620911896

S.N.	River Name	River code	X	Y
450	Lal Khola	KN-I(MN)-0-0-13	87.8807553067	26.7044065319
451	Deumai Khola	KN-I(MN)-0-0-01	87.7791312205	26.8297650759
452	Kamal Khola	KN-I(MN)-0-0-04	87.8054706244	26.4649108191
453	Ingala Khola	KN-I(MN)-0-0-08	87.9686321762	26.9999005818
454	Dhuwa Khola	KN-I(MN)-0-0-14	87.9678795102	27.0118149823
455	Jogmai Khola	KN-I(MN)-0-0-03	87.9518230290	26.8886012237
456	Kankaimai Nadi	KN-I(MN)-0-0-05	87.7760840492	26.4315356567
457	Puwa Khola	KN-I(MN)-0-0-02	87.9115285552	26.8593199832
458	Satasi Khola	KN-I(MN)-0-0-11	87.8465750685	26.5663596467
459	Kankaimai Khola	KN-I(MN)	87.7596689361	26.4094567579
460	Sya Khola	KN-I(MN)-0-0-10	87.7967675538	26.8257994266
461	Mala Gad	KA-3-1-02	81.3315746434	29.3534930827
462	Chauratha Khola	KA-6-0-09	81.7805949099	28.8807206274
463	Basante Khola	KA-1-0-15	81.3258095614	28.7813229813
464	Bhyagute Khola	KA-3-0-36	81.0804238062	29.4964677222
465	Marma Khola	KA-1-0-08	82.1593045740	28.6140132078
466	Matela Khola	KA-6-0-08	81.6804444132	28.7733552429
467	Melti Khola	KA-3-0-35	81.1436380286	29.0203769489
468	Mana Gad	KA-3-1-19	81.3966546663	29.3983962708
469	Bhuka Khola	KA-0-0-23	81.7264387122	29.3711060625
470	Mimibang Khola	KA-2-1-02	82.0830723403	29.7567327420
471	Bauli Gad	KA-3-0-07	81.1954783680	29.5494374430
472	Belkher Khola	KA-0-0-12	81.4276501386	29.0265733892
473	Betan Khola	KA-0-0-27	81.1363626295	28.8723192383
474	Bheri Nadi	KA-1	81.2596031615	28.7414366258
475	Bheri Khola	KA-5-0-02	81.9925049463	29.2235078229
476	Bhitta Paduwa Khola	KA-1-5-02	82.6807940768	29.2691733695
477	Bhius Khola	KA-1-3-03	82.0161635091	28.6625928889
478	Bharta Gad	KA-5-0-08	81.6126088045	29.1197989788
479	Moga Khola	KA-4-1-21	82.6314149876	29.5594333702
480	Lungreli Gad	KA-3-1-18	81.2065932552	29.2139317472
481	Mugu Karnali Nadi	KA-4	81.8530237068	29.6195724385
482	Logu Khola	KA-4-0-08	82.1971718197	29.5511863170
483	Lohare Khola	KA-6	81.5801685011	28.7787801848
484	Loti Karnali Nadi	KA-2-1	82.0332891604	29.7473887257
485	Luma Khola	KA-4-0-03	82.1351854403	29.5760052957
486	Bauli Gad	KA-3-1-03	81.4603822450	29.4509098120
487	Luruppa Khola	KA-2-2-01	81.9274494659	29.9527433644
488	Madi Khola	KA-3-1-21	81.4557823816	29.5181229864
489	Mahendra Mali Khola	KA-5-1-06	82.0038378157	29.4025982785
490	Mait Khola	KA-4-1-15	83.2136312361	29.4298774618

S.N.	River Name	River code	X	Y
491	Nalsyagu Khola	KA-1-4	82.2945200529	28.7854260780
492	Lapha Gad	KA-0-0-14	81.7097222751	29.2703917651
493	Lode Gad	KA-0-0-25	81.4253838408	28.9653576673
494	Muglu Khola	KA-1-2-05	82.4205557692	28.6402005354
495	Lisni Gad	KA-3-0-28	81.3249269145	29.6782516046
496	Limne Khola	KA-2-0-20	81.9134691158	29.7811390538
497	Mugu Khola	KA-4-2	82.4345299543	29.5906229106
498	Mukdem Khola	KA-4-1-16	83.2697668196	29.3886789729
499	Musi Khola	KA-4-1-11	83.1306749817	29.4812093956
500	Musyang Khola	KA-2-1-04	82.1655626477	29.8306690358
501	Nagong Khola	KA-4-1-02	83.0697028820	29.4908386412
502	Lare Khola	KA-2-2-04	82.0455837561	30.1103315135
503	Laregonba Khola	KA-2-2-10	82.0178851726	30.0452404361
504	Lepche Khola	KA-8-0-05	81.6445668366	29.8867019121
505	Lihi Khola	KA-5-1-04	81.9837844388	29.3151225604
506	Limi Khola	KA-2-3	81.4457334057	30.1810839208
507	Bichchhya Khola	KA-8-0-01	81.7017483114	29.6463230037
508	-	KA-2-3-04	81.7473969189	30.3055058193
509	Puma Khola	KA-1-2-06	82.5441853157	28.6466876150
510	Bargaun Khola	KA-1-2-09	82.4564229848	28.6697090990
511	-	KA-1-0-29	82.5043173918	29.1157338059
512	Tusari Gad	KA-3-1-16	81.4431702636	29.5073745806
513	-	KA-1-0-24	82.5062675172	28.8934852470
514	Bare Khola	KA-5-1-11	81.9818897667	29.3282669381
515	Banggad Khola	KA-1-0-05	82.0235695636	28.5139008649
516	Ana Gad	KA-3-0-29	80.9807367422	29.2213800795
517	Babila Khola	KA-5-0-05	82.3317547465	29.2199014943
518	Badkhi Khola	KA-5-0-13	81.9013959225	29.1849251391
519	Baj Gad	KA-5-1-10	81.9510395572	29.2584373813
520	Bali Gad	KA-5-0-09	81.6620516715	29.1139698857
521	Banganga Khola	KA-5-1-07	81.9823861758	29.3880094500
522	Changpola Khola	KA-4-1-24	83.1845401672	29.4466253552
523	Chaudhabis Khola	KA-5-2-01	82.2596383223	29.3152259302
524	Chhal Gad	KA-1-1-09	82.7818727125	29.0238580251
525	Chhala Khola	KA-2-1-05	82.0848207493	29.8144217151
526	Chham Khola	KA-4-2-03	82.5207593483	29.6525868611
527	Chhamghat Khola	KA-6-0-01	81.6849600526	28.8047201545
528	Chama Gad	KA-3-0-20	80.7737799273	29.3641694827
529	Chaira Khola	KA-3-0-05	81.1450976723	29.0226380074
530	Bau Khola	KA-5-1-08	82.3295054068	29.4377469211
531	Byas Gad	KA-1-1-11	82.9554643468	28.9366660122

S.N.	River Name	River code	X	Y
532	Bumuchhiya Khola	KA-2-0-01	81.5255219559	30.0812876644
533	-	KA-2-2-09	82.0439005477	30.1394163006
534	Barju Gad	KA-3-1-08	81.3231726542	29.3480353234
535	Battise Khola	KA-1-0-27	81.4231934271	28.6740007385
536	Biurani Khola	KA-1-0-34	81.3812690179	28.7549170640
537	Bota Khola	KA-0-0-17	81.2316967340	28.7871148725
538	Budhi Ganga Nadi	KA-3-1	81.1057079154	29.0994944921
539	Bumcha Khola	KA-4-0-09	82.0210862540	29.5930110000
540	Burunge Khola	KA-1-0-19	82.1250148606	28.6227639256
541	Peni Palat Khola	KA-1-5-03	82.6433224160	29.2074849578
542	Kangja Khola	KA-4-2-04	82.5283260029	29.8394532522
543	Jhupra Khola	KA-1-0-14	81.6683176912	28.5169179645
544	Kanjirowa Khola	KA-4-1-14	82.8326250524	29.4504271024
545	Kodari Gad	KA-3-1-05	81.4261842627	29.4196287541
546	Kogi Khola	KA-4-2-01	82.5375730765	29.7934292425
547	Kogichwa Khola	KA-4-2-07	82.5390033298	29.8157322509
548	Koltadi Khola	KA-0-0-11	81.0524079323	28.8758705563
549	Korang Khola	KA-4-1-10	83.1434852565	29.4776450191
550	Koireli Gad	KA-3-0-37	80.9900541084	29.2199756982
551	Hima Nadi	KA-5-1	81.9101807406	29.2001231460
552	Holu Khola	KA-1-0-21	82.2309262571	28.6909597141
553	Humla Karnali Nadi	KA-2	81.8529593964	29.6201311102
554	Ikdi Gad	KA-3-1-04	81.2684362285	29.3021370098
555	Jadari Gad	KA-3-0-10	81.1290045620	29.5032832591
556	Jagdula Khola	KA-1-5	82.6460598008	29.1439555515
557	Jahari Khola	KA-1-0-03	82.2052407594	28.6767626473
558	Jairi Khola	KA-1-1-06	82.9106565110	28.9340805722
559	Jaldi Gad	KA-1-0-02	82.4175481938	28.8492125180
560	Jaljala Khola	KA-5-1-02	82.0267292809	29.4098580374
561	Kuliban Khola	KA-1-0-13	81.3264029236	28.7806905705
562	Kulla Gad	KA-2-0-19	81.9931491498	29.7633848141
563	Kumara Gad	KA-7-0-06	80.6583017057	29.0887772649
564	Katti Khola	KA-6-0-02	81.7361499948	28.8127594150
565	Kawadi Khola	KA-8	81.7739046504	29.6057276356
566	Karmanas Gad	KA-7-0-03	80.6592265323	29.0881927414
567	Khetyad Khola	KA-0-0-01	81.7896246370	29.5287329506
568	Khahare Khola	KA-1-0-26	81.8083586405	28.4509532133
569	Khairala Khola	KA-7-0-05	80.8205424469	28.9304779243
570	Khulli Khola	KA-0-0-07	81.0337156374	28.9666158157
571	Khare Khola	KA-5-1-01	82.3111804367	29.4084211527
572	Khati Khola	KA-1-1-10	82.6957389040	28.9935276400

S.N.	River Name	River code	X	Y
573	Keheing Khola	KA-4-1-03	83.2742620780	29.2992253996
574	Kasa Gad	KA-3-1-07	81.3030941651	29.3219838490
575	Hepka Khola	KA-2-0-03	81.7664224168	30.0020602051
576	Karanga Khola	KA-2-0-13	81.8634352696	29.8821701670
577	Kunda Khola	KA-0-0-03	81.7142316634	29.4746746066
578	Kunwa Khola	KA-2-0-16	81.5327560152	30.1212051924
579	Kwalungwa Khola	KA-2-0-02	81.6522166715	30.0341114486
580	Lachama Khola	KA-2-2-03	82.0434355765	30.1486010326
581	Lachhi Gad	KA-3-0-23	81.2210037184	29.5677927635
582	Lahaghat Khola	KA-1-0-35	82.0822931413	28.6180038626
583	Kudilla Khola	KA-2-0-15	81.8429691393	29.9475480364
584	Khung Khola	KA-4-1-17	83.1125411569	29.4882630497
585	Kapadi Khola	KA-7-0-02	80.7490524727	29.0063438516
586	Kanjirowa Khola	KA-1-5-01	82.6774297375	29.2963219020
587	Jhula Khola	KA-5-0-11	82.2412635179	29.2627917562
588	Jhumre Khola	KA-1-4-03	82.2988658221	28.7917230119
589	Phu Gad	KA-0-0-18	81.6826212570	29.2464019533
590	Pathar Khola	KA-5-1-03	81.9083862120	29.2057213775
591	Nehar Khola	KA-2-0-10	82.0025090435	29.7177958727
592	Neti Khola	KA-8-0-03	81.7123685739	29.7183597372
593	Nikas Khola	KA-1-0-10	81.5467011482	28.5728445128
594	Nilkati Khola	KA-3-0-41	81.1889948377	29.8606315265
595	Ning Khola	KA-2-3-07	81.6522914908	30.2505188195
596	Ning Khola	KA-2-2-02	82.0137732669	30.1997217764
597	Nune Gad	KA-1-0-17	82.4863237384	29.0690858560
598	Nuwaghari Gad	KA-3-0-11	80.8674277328	29.4117498158
599	Obang Khola	KA-1-0-28	82.5076630491	28.8964865760
600	Halji Khola	KA-2-3-06	81.5138998587	30.2193615167
601	Odi Khola	KA-5-1-09	81.9614636191	29.2728553263
602	Pukcheng Khola	KA-4-1-18	82.6510958108	29.5403642079
603	Phala Gad	KA-0-0-21	81.7491015262	29.3017653686
604	Phanda Khola	KA-4-1-26	82.7808318070	29.5004048283
605	Phedi Khola	KA-1-0-20	82.5709908752	29.0573008292
606	Phoigar Khola	KA-1-0-32	82.6029689608	29.1154952624
607	Phor Khola	KA-4-1-28	82.7428832122	29.5348598845
608	Phulam Khola	KA-0-0-28	81.4115167374	28.9953379360
609	Phulching Khola	KA-1-1-12	82.6738032597	28.9957867825
610	Phupharka Khola	KA-2-0-09	81.5999865054	30.0617117370
611	Pogade Khola	KA-0-0-36	81.0465977210	28.9769207239
612	Polte Khola	KA-4-1-05	83.2845632636	29.3677455188
613	Prabhali Gad	KA-3-1-10	81.2128582870	29.2343412595

S.N.	River Name	River code	X	Y
614	Puiya Khola	KA-2-0-18	81.6211173003	30.0562985507
615	Pelma Khola	KA-1-2-01	82.7497037349	28.6335716620
616	Juli Odar Khola	KA-5-0-03	82.3326447500	29.2204093895
617	Juwa Nadi	KA-5-2	82.2047463827	29.2747280369
618	Kailash Khola	KA-3-1-01	81.2099872732	29.1589160228
619	Kala Gad	KA-3-0-17	80.9056543295	29.2471080924
620	Kalanga Nadi	KA-3-2	80.9107411451	29.4450431587
621	Kali Khola	KA-1-0-36	82.0035030071	28.5802719861
622	Kalpani Khola	KA-1-0-31	81.6033660048	28.5069929256
623	Kamala Nadi	KA-7-0-04	80.6318705178	29.0424347025
624	Kang Khola	KA-4-0-05	82.3985169567	29.5795305992
625	Juil Gad	KA-3-0-22	80.9905753900	29.4679736043
626	Jugai Khola	KA-1-0-16	82.0210233556	28.6243571129
627	Jogad Khola	KA-5-0-07	82.1823794934	29.2691706104
628	Padam Khola	KA-6-0-04	81.8166746796	28.9108076746
629	Paduka Gad	KA-0-0-08	81.5230222325	28.8683751718
630	Paima Khola	KA-0-0-13	81.7832852582	29.6217292955
631	Parajuli Khola	KA-6-0-03	81.6614657156	28.7617609461
632	Namlang Nadi	KA-4-1	82.4345322219	29.5900889706
633	Jhyanglung Khola	KA-4-1-06	82.9451005640	29.5366725674
634	Jijadi Gad	KA-3-1-15	81.2298226964	29.2539948524
635	Jima Khola	KA-4-0-11	81.9703791361	29.6103092288
636	Alle Khola	KA-1-1-05	82.6145931592	28.9779018176
637	Ruru Bangchu Khola	KA-5-0-01	81.7423088812	29.1100887541
638	Rup Gad Khola	KA-1-1-04	82.8669572234	28.9739763628
639	Tangkya Khola	KA-4-1-08	82.9008557736	29.5372142469
640	Tangur Khola	KA-2-0-14	81.7553853515	30.0248686778
641	Sannido Gad	KA-0-0-06	81.6330781857	29.2157072810
642	Sani Gad	KA-3-2-01	80.8567857961	29.5822258819
643	Sani Bheri Nadi	KA-1-2	82.2775323229	28.6920184014
644	Sangrahi Khola	KA-1-0-06	81.9981452701	28.4635929493
645	Samuha Gad	KA-3-0-19	80.9219869461	29.2462773716
646	Salma Khola	KA-1-3-04	82.0242958449	28.7231530712
647	Salli Khola	KA-2-0-04	81.6492010875	30.0369208303
648	Salle Khola	KA-7-0-07	80.8257526903	28.9315402753
649	Salimor Khola	KA-3-0-03	81.1679612813	29.8710219413
650	Sakayal Khola	KA-3-0-04	80.7723591441	29.3022842734
651	Sarani Gad	KA-3-1-11	81.2911976997	29.3093094493
652	Sakya Khola	KA-2-3-02	81.6871141729	30.3313501758
653	Limbu Khola	KA-0-0-24	81.0743207885	28.8735752463
654	Kara Khola	KA-0-0-31	81.1050217188	28.8457622096

S.N.	River Name	River code	X	Y
655	Bungad Khola	KA-0-0-22	81.2853075992	28.6733483151
656	Bade Khola	KA-0-0-34	81.2583112889	28.7424989434
657	Orai Khola	KA-0-1-03	81.3400860006	28.5336222857
658	Taisolu Khola	KA-2-3-03	81.6893830507	30.3331747350
659	Ambasa Khola	KA-0-1-01	81.2856588187	28.4553214538
660	Jhamati Khola	KA-0-1-02	81.2741512637	28.4353096753
661	Bharbung Khola	KA-1-1-01	83.0367197246	28.8963105127
662	Karnali Nadi	KA	81.1899492270	28.3648435084
663	Bhadali Nala	KA-0-0-30	81.1221345909	28.4750785818
664	Orai Khola	KA-0-1-04	81.3405251575	28.5324997447
665	Orai Khola	KA-0-1	81.2121794534	28.3722115865
666	Gumna Nadi	KA-0-0-16	81.2326055420	28.5179582026
667	Tangtungge Khola	KA-1-5-04	82.6457124896	29.1906769131
668	Rum Khola	KA-4-0-10	82.0241893937	29.5915050607
669	Satdawa Khola	KA-0-0-15	81.2423961335	28.9152791891
670	Sokar Gad	KA-3-2-02	80.9152648776	29.6128920446
671	Sot Khola	KA-1-0-04	81.4203626399	28.7270919251
672	Tagre Khola	KA-4-1-20	82.7940163710	29.4651546260
673	Talung Khola	KA-2-2-08	81.9928064677	29.9999135029
674	Talkoti Gad	KA-3-0-15	81.2951217680	29.6072473778
675	Talkot Gad	KA-3-0-18	80.8560791343	29.2880505673
676	Talamera Khola	KA-0-0-10	81.4683216740	29.0766287194
677	Talak Khola	KA-4-2-02	82.4952811856	29.6367689339
678	Takya Khola	KA-4-2-05	82.5277387609	29.8393761094
679	Taksu Khola	KA-1-0-11	82.4492526541	28.8691387773
680	Takla Khola	KA-4-1-01	82.7130003143	29.5463688887
681	Take Khola	KA-2-1-01	82.1662021460	29.8304236331
682	Sera Khola	KA-0-0-26	81.4532323612	29.0597477969
683	Simarawa Khola	KA-3-1-12	81.2515331619	29.2857536975
684	Simla Gad	KA-5-0-12	81.7024470642	29.1063690235
685	Simtari Gad	KA-3-1-06	81.4354997609	29.4838670326
686	Sir Khola	KA-3-0-40	81.0575576091	29.1612194352
687	Sisne Khola	KA-1-2-04	82.6926485453	28.6747815906
688	Simta Khola	KA-1-0-12	82.0126914601	28.5486944515
689	Sije Khola	KA-4-1-19	83.0603380032	29.4938672470
690	Shobha Khola	KA-4-0-04	82.2319543423	29.5562496578
691	West Seti Nadi	KA-3	81.1037056385	28.9664378009
692	Serog Khola	KA-4-0-12	82.4115414385	29.5855229210
693	Sepu Khola	KA-1-4-04	82.2882723981	28.8827483230
694	Rukum Gad	KA-1-2-03	82.6180958295	28.6312375679
695	Sot Khola	KA-6-0-06	81.5842308957	28.7840851923

S.N.	River Name	River code	X	Y
696	Syaule Khola	KA-0-0-35	81.1861514555	28.9155255634
697	Rauli Khola	KA-2-1-03	82.0599886591	29.7456293393
698	Rati Khola	KA-6-0-07	81.6287722884	28.7701605952
699	Raphu Khola	KA-4-1-22	82.5207020732	29.5708384243
700	Rani Gad	KA-3-0-39	80.9190151725	29.4570215691
701	Ranga Gad	KA-1-4-02	82.2774860810	28.9302210956
702	Rakse Urai Khola	KA-3-0-24	81.2027428384	29.9652375373
703	Rakabu Khola	KA-2-2-07	82.0394345769	30.2170221420
704	Raha Gad	KA-0-0-05	81.5660279257	29.1263119110
705	Ruka Khola	KA-4-1-12	82.6797594065	29.5263646532
706	Regil Khola	KA-0-0-20	81.6128016044	29.1735439658
707	Sayali Gad	KA-3-0-08	80.8141324138	29.3647515748
708	Rip Gad	KA-2-0-08	81.8620845283	29.8126646088
709	Syangbang Khola	KA-3-0-01	81.2609816310	29.8318997549
710	Swaksa Khola	KA-4-1-13	82.8892057811	29.5259707683
711	Suwa Gad	KA-1-3-01	82.0602604084	28.7609102053
712	Suni Gad	KA-3-0-06	81.2290684683	29.5739330250
713	Sumdo Khola	KA-4-1-07	82.5484886630	29.5658718126
714	Sulung Khola	KA-4-1-09	83.2733382398	29.2994858351
715	Suli Gad	KA-1-1-02	82.8743810091	28.9725687780
716	Saru Khola	KA-1-3-02	82.0611811769	28.7611155505
717	Rudi Khola	KA-0-0-29	81.7184505974	29.4069727152
718	Rohati Khola	KA-0-0-33	81.5063960695	29.0900396848
719	Riusa Khola	KA-4-0-06	82.3704374522	29.5703236402
720	Rigda Khola	KA-4-0-07	82.2742120507	29.5831842395
721	Ram Gad	KA-0-0-04	81.4770987139	28.9126932659
722	Til Khola	KA-2-3-05	81.4688224778	30.2031082343
723	Dungri Gad	KA-3-0-27	81.2059916835	29.5555833983
724	Chhera Khola	KA-1-3	82.0365698423	28.6386608217
725	Dwari Gad	KA-3-0-32	81.2432181399	29.5955698264
726	Gidi Khola	KA-5-0-04	82.1065069457	29.2390757123
727	Gija Gad	KA-1-0-22	82.3470656181	28.7901830903
728	Gilang Khola	KA-4-2-08	82.4698747954	29.6015903650
729	Girighat Khola	KA-1-0-23	81.5310507715	28.5862850327
730	Gochhe Khola	KA-1-0-09	81.8336298715	28.4416679112
731	Chyamni Khola	KA-4-0-01	82.2962956816	29.5949731626
732	Chhinchu Khola	KA-1-0-07	81.6299091091	28.5150810481
733	Chhu Khola	KA-4-1-25	82.9815160012	29.5325962944
734	Chhyalonba Khola	KA-2-2-12	82.0325504401	30.0868125110
735	Chinggad Khola	KA-1-0-01	81.6882485727	28.5103929240
736	Chippe Khola	KA-3-1-17	81.2137501486	29.2327795112

S.N.	River Name	River code	X	Y
737	Chu Gad	KA-1-1-08	82.7753789340	29.0252613378
738	Chuti Gad	KA-0-0-19	81.7231106937	29.4885155917
739	Chuwa Khola	KA-2-2	81.8579334009	29.9412330281
740	Ghodasain Khola	KA-5-2-02	82.2285332048	29.3045601462
741	Godare Khola	KA-3-0-31	80.9313653167	29.2599308724
742	Goru Khola	KA-5-0-06	81.9476278573	29.2231940145
743	Gala Gad	KA-3-0-25	81.1206439579	29.0731825091
744	Galli Gad	KA-1-1-13	82.7900681743	29.0194873059
745	Galpha Gad	KA-2-0-05	81.8792421698	29.6519303331
746	Gam Gad	KA-4-0-02	82.1708340081	29.5537316134
747	Garpung Khola	KA-1-0-18	82.6464099748	29.1433683533
748	Ghalje Khola	KA-2-2-11	81.9735716631	29.9805128564
749	Ghatechaur Khola	KA-1-0-25	82.5007554265	29.0632976270
750	Ghatganga Khola	KA-3-0-02	81.3156711431	29.7248248655
751	Dwari Gad	KA-3-0-26	80.9449866131	29.2538583025
752	Gothi Khola	KA-2-0-06	81.9537412675	29.7767776385
753	Gudpal Khola	KA-3-0-34	81.2615849241	29.7827670070
754	Gurgure Khola	KA-2-0-12	81.7669301312	30.0004514337
755	Golma Gad	KA-3-0-30	80.8032218159	29.3006477583
756	Ghatte Khola	KA-2-2-06	81.8896364735	29.9577668899
757	Ghatte Khola	KA-5-1-12	82.0579438627	29.4206019227
758	Dwari Khola	KA-6-0-10	81.8157428272	28.9218289288
759	Gaddi Gad	KA-3-0-09	81.0317572526	29.1853548896
760	Gadsera Gad	KA-7-0-01	80.7365050760	29.0110920218
761	Gairi Gad	KA-3-1-20	81.1717004124	29.1390747276
762	Chhimdi Khola	KA-8-0-02	81.7371294436	29.8014889666
763	Tani Khola	KA-6-0-05	81.7687154146	28.8665383770
764	Tipada Gad	KA-3-1-14	81.4155983599	29.4070186410
765	Tipgad Khola	KA-0-0-02	81.7532420891	29.3118644151
766	Juddi Khola	KA-0-0-09	81.7180085500	29.4088744391
767	Yenjam Khola	KA-4-2-06	82.5163932185	29.7727364531
768	Tarap Khola	KA-1-1-03	83.0360403496	28.8965003832
769	Yangchu Khola	KA-2-0-17	81.8761706014	29.9183977872
770	Tattar Gad	KA-1-0-33	82.4030171031	28.8431881628
771	Chyaune Gad	KA-8-0-06	81.7521988928	29.8453562662
772	Thuli Palat Khola	KA-1-5-05	82.6535301374	29.2437104569
773	Thuli Ganga Nadi	KA-3-1-09	81.4569996487	29.5706120513
774	Thuli Gad	KA-7	80.9816853993	28.9407904549
775	Thuli Bheri Nadi	KA-1-1	82.5790651544	28.9894713242
776	Thini Khola	KA-0-0-32	81.7075011084	29.4500595640
777	Thalari Gad	KA-3-0-21	81.0170108477	29.4806559384

S.N.	River Name	River code	X	Y
778	Tila Nadi	KA-5	81.5799797395	29.1360195289
779	Telung Khola	KA-2-3-01	81.6635881056	30.2650923466
780	Telpani Khola	KA-1-0-30	81.4926998993	28.6114733739
781	Taru Gad	KA-3-0-14	81.0536318468	29.4873062528
782	Yalakot Khola	KA-1-1-07	82.9998644652	28.8796395758
783	Tartang Khola	KA-4-1-04	82.8642173532	29.4646423841
784	Uttar Ganga Nadi	KA-1-2-02	82.7491583923	28.6331538992
785	Dhakpal Khola	KA-4-1-27	82.4514582320	29.5714812740
786	Daha Gad	KA-1-4-01	82.2765779341	28.9301700944
787	Dhung Gad Khola	KA-3-0-12	80.7856065032	29.3666645725
788	Dil Gad	KA-3-0-33	81.1622487015	29.5260900092
789	Dogada Khola	KA-3-1-13	81.4624263758	29.5454509512
790	Dogade Khola	KA-0-0-37	81.3138704399	28.9204380143
791	Dogaira Gad	KA-3-0-16	81.3308492274	29.6874060083
792	Dumai Khola	KA-1-2-11	82.5785096910	28.6313326585
793	Deuta Khola	KA-1-2-08	82.3501294080	28.6604515577
794	Darne Khola	KA-1-2-07	82.4752841362	28.6722672679
795	Tumling Khola	KA-2-2-05	82.0137119612	30.0281045789
796	Daukhar Khola	KA-3-0-38	81.1802885270	29.9242755889
797	Tumkot Khola	KA-2-0-07	81.5307878181	30.0771606670
798	Tuda Gad	KA-3-0-13	81.0999701786	29.1021843409
799	Tubang Khola	KA-1-2-10	82.6730214613	28.6741471129
800	Titatiya Khola	KA-8-0-04	81.7200186170	29.6192150046
801	Puwe Khola	KA-4-1-23	82.9842323046	29.5330068006
802	Tarkesya Nadi	KA-2-0-11	81.5183487760	30.1559416340
803	Daine Khola	KA-5-1-05	82.3303772174	29.4377394188
804	Um Khola	KA-5-0-10	82.1383409305	29.2546140988
805	Khado Nadi	S14-0-00-01	86.7490840979	26.4405880605
806	Kisni Khola	S03-0-00-01	87.7504186650	26.4134521516
807	Sera Khola	KO-1-1-06	87.0092781983	27.1779433039
808	Kang Khola	KO-8-0-04	86.7790122346	26.7770617628
809	Dudu Khola	KO-4-0-15	86.7166163267	27.4407340421
810	Mendolung Khola	KO-2-0-24	87.7246088932	27.7660817835
811	Akhuwa Khola	KO-1-1-02	87.1011007826	27.0962451442
812	Singjengma Khola	KO-2-0-19	87.7364658778	27.7498749283
813	Sawa Khola	KO-0-0-01	86.7547967959	26.9745281451
814	Rangkula Khola	KO-0-0-16	86.5721077462	27.1482925514
815	Gumu Khola	KO-3-0-14	86.1496938787	27.7127004738
816	Pikhuwa Khola	KO-1-1	87.1826892987	27.0439155879
817	Piluwa Khola	KO-1-0-03	87.2392180103	27.2119003870
818	Khari Khola	KO-4-0-16	86.6952680651	27.6158964977

S.N.	River Name	River code	X	Y
819	Kaguwa Khola	KO-1-0-26	87.1940297280	27.4972826525
820	Kabeli Nadi	KO-2-1	87.6958562868	27.2905614271
821	Ekhuwa Khola	KO-0-0-05	87.1160270392	26.9234972482
822	Ghunsa Khola	KO-2-2	87.8026492835	27.5319401134
823	Ikhuwa Khola	KO-1-0-08	87.3520180785	27.6057905478
824	Melamchi Khola	KO-6-0-01	85.5770217294	27.8330752910
825	Phedi Khola	KO-2-0-29	87.7961033862	27.5783317752
826	Niguli Khola	KO-0-0-30	85.9774650466	27.3608400470
827	Chhujung Khola	KO-1-0-04	87.4459904219	27.7651616898
828	Lodir Khola	KO-4-2-04	86.5758331412	27.5222975259
829	Chhyatungdinga Glacier	KO-2-2-07	88.0333711795	27.8078705345
830	Siwa Khola	KO-2-3-02	87.6116808094	27.4847909592
831	Maiwa Khola	KO-2-0-05	87.6222559727	27.3638291866
832	Sisa Khola	KO-4-2-02	86.5676850573	27.4460452689
833	Laiku Khola	KO-0-0-08	86.6700681415	27.1160736780
834	Makhuwa Khola	KO-0-0-24	86.9505336886	26.9051617747
835	Chharuwa Khola	KO-2-0-13	87.4377210521	26.9708261929
836	Singati Khola	KO-3-0-05	86.1645697348	27.7357389098
837	Dadi Khola	KO-5-0-06	85.8777495946	27.7642670040
838	Sokhu Khola	KO-0-0-12	86.3719893373	27.1914648201
839	Lapche Khola	KO-3-0-02	86.2192791966	27.9654463961
840	Kinja Khola	KO-7-0-06	86.4089325499	27.5850270079
841	Budum Khola	KO-4-1-01	86.8293392583	27.5008382104
842	Larkhu Khola	KO-7-0-13	86.2249490962	27.3837890068
843	Sobuwa Khola	KO-2-0-15	87.6233963752	27.3505404116
844	Muga Khola	KO-1-0-17	87.1985248253	27.0074865032
845	Buwa Khola	KO-0-0-04	86.9136743424	26.8967944620
846	Baeku Khola	KO-0-0-31	86.6294223816	27.1348897775
847	Hewa Khola	KO-2-0-02	87.7112447752	27.1566576988
848	Hewa Khola	KO-1-2-01	87.2114655963	27.2934335184
849	Ghyang Khola	KO-3-0-19	86.0834841062	27.5612897711
850	Nyamyas Masai Khola	KO-5-1-01	85.7512593344	28.0685965959
851	Dhamile Khola	KO-0-0-18	85.8792219380	27.4166280461
852	Pangkhu Khola	KO-4-0-13	86.5375710926	27.2068325132
853	Bebar Khola	KO-0-1-02	85.4920398473	27.5737520466
854	Jhyari Khola	KO-6-0-02	85.6719994015	27.7053068318
855	Sowa Khola	KO-2-0-09	87.5357716931	27.0400201080
856	Rolwaling Khola	KO-3-0-04	86.2229304139	27.8813781321
857	Sapsu Khola	KO-7-0-12	86.3319052430	27.5107262321
858	Lohale Khola	KO-8-0-08	86.7151295839	26.7674528795

S.N.	River Name	River code	X	Y
859	Simbua Khola	KO-2-0-03	87.8030751820	27.5259477485
860	Bhalu Khola	KO-0-4-07	85.8568579244	27.5928710943
861	Chulepu Khola	KO-7-0-04	86.2964604742	27.4807616858
862	Thotane Khola	KO-4-0-05	86.6579227189	27.2667451581
863	Bhugdeu Khola	KO-0-1-06	85.5863709762	27.5303159283
864	Tamewa Khola	KO-2-0-30	87.7965746437	27.5108609353
865	Dingsamba Khola	KO-2-0-18	87.7353465312	27.7114056535
866	Lagen Khola	KO-5-1-03	85.7506501430	28.0685662156
867	Kyasar Khola	KO-4-0-10	86.7221203601	27.7687111495
868	Leguwa Khola	KO-1-0-12	87.2703067235	27.1487372230
869	Tamakoshi Nadi	KO-3	85.9836239396	27.3508896898
870	Barun Nadi	KO-1-0-01	87.3642109264	27.6930758561
871	Tengwa Khola	KO-2-0-28	87.7471575016	27.4897499026
872	Pheda Khola	KO-0-4-03	85.8851025196	27.6124332535
873	Pokali Khola	KO-7-0-08	86.2501119401	27.4262891289
874	Sejangma Khola	KO-2-0-27	87.7989525263	27.6492107671
875	Bhuwa Khola	KO-4-1-03	86.8412376273	27.5112751370
876	Khani Khola	KO-0-4-01	85.8096420197	27.5099690808
877	Koya Khola	KO-2-0-10	87.6449374961	27.1292665856
878	Saraswati Khola	KO-8-0-03	86.6779494485	26.7964398400
879	Langkhuwa Khola	KO-1-2-02	87.3058763729	27.4261718962
880	Thado Khola	KO-4-2-06	86.6303721208	27.3925415470
881	Junbesi Khola	KO-4-2-03	86.5793841524	27.5493635193
882	Banauti Khola	KO-7-0-11	86.2624070105	27.4553366138
883	Mewa Khola	KO-2-3	87.6270809811	27.3768959725
884	Dhad Khola	KO-6-0-08	85.6038842159	27.7484576066
885	Trijuga Nadi	KO-8	86.9834180333	26.6961710493
886	Gideri Khola	KO-0-0-23	87.0517853905	26.7856456524
887	Duwar Khola	KO-8-0-07	86.8790831872	26.7701160104
888	Mahuli Nadi	KO-0-0-07	86.9199664019	26.5858817294
889	Chyadu Khola	KO-3-0-10	86.2113907495	27.9421894301
890	Saptakoshi Nadi	KO	86.9137261401	26.4888688693
891	Rawa Khola	KO-4-0-02	86.6708213564	27.2719029188
892	Lama Khola	KO-8-0-02	86.9118687875	26.7628460964
893	Arun Nadi	KO-1	87.1554059829	26.9167103764
894	Balephi Khola	KO-5-1	85.7796892988	27.7328392266
895	Gopi Khola	KO-0-0-21	85.8092925855	27.4588523491
896	Siktell Khola	KO-1-1-03	87.0273579047	27.1477387239
897	Bhatauli Khola	KO-3-0-08	86.0289316527	27.3750864926
898	Punyamati Khola	KO-0-1-01	85.5188381664	27.5853536491
899	Ladku Khola	KO-0-1-03	85.5579527163	27.5507377648

S.N.	River Name	River code	X	Y
900	Larke Khola	KO-6-0-04	85.6421591870	27.9802852318
901	Jhyaku Khola	KO-3-0-17	86.1496011117	27.7181540148
902	Andheri Khola	KO-2-0-22	87.5365089584	27.0178706977
903	Bhyakur Khola	KO-0-1-05	85.7517740979	27.4712844513
904	Ramdu Khola	KO-4-0-12	86.4839991002	27.1807831922
905	Apsuwa Khola	KO-1-0-05	87.2312239962	27.5394417460
906	Bahadur Khola	KO-0-0-11	86.3896751921	27.1798442119
907	Andheri Khola	KO-2-0-20	87.7511509470	27.2157679868
908	Bitijor Khola	KO-0-0-13	86.1089631586	27.2707596867
909	Lowa Khola	KO-2-3-03	87.6068491040	27.4585476695
910	Dudhkund Khola	KO-4-2-01	86.5800493524	27.5497715922
911	Nupchu Khola	KO-2-2-06	87.9729878458	27.7342129990
912	Ramdang Glacier	KO-2-2-05	88.0064180714	27.7677481165
913	Kali Khola	KO-8-0-06	86.9252436561	26.7625562754
914	Sorung Khola	KO-0-0-14	86.4920417188	27.1047212493
915	Nupche Khola	KO-7-0-01	86.4556928122	27.6725236118
916	Charange Khola	KO-3-0-07	86.0752255252	27.6134937611
917	Phunguwa Khola	KO-2-0-31	87.6799359306	27.2709272632
918	Baruwa Khola	KO-8-0-01	86.7211620961	26.7706099534
919	Tangkhuwa Khola	KO-2-0-12	87.3813578248	26.9455152372
920	Leksuwa Khola	KO-1-0-15	87.3613579934	27.6696307241
921	Kubhinde Khola	KO-5-1-05	85.7631027875	27.7777453089
922	Buku Khola	KO-7-0-03	86.3560438946	27.5260491437
923	Gopi Khola	KO-3-0-11	86.0754110047	27.6117975283
924	Tuwa Khola	KO-0-0-10	86.7274680333	27.0389370369
925	Phawa Khola	KO-2-1-07	87.8570307069	27.3284026111
926	Silkhu Khola	KO-7-0-02	86.2389195264	27.3032008831
927	Phawa Khola	KO-2-1-03	87.7591971202	27.2804892011
928	Hingkuwa Khola	KO-1-1-05	86.9849629931	27.2243076673
929	Tyau Khola	KO-0-0-28	86.1694588187	27.2529056411
930	Raghuwa Khola	KO-2-0-16	87.4020858021	26.9561291469
931	Siswa Khola	KO-0-0-32	87.0366676559	26.8059413553
932	Pauda Khola	KO-0-0-17	86.9620971377	26.6582559243
933	Chhatang Khola	KO-0-0-22	86.7022535097	27.0812135855
934	Phundri Khola	KO-7-0-15	86.2124592031	27.2665811547
935	Chauri Khola	KO-0-4	85.7978089297	27.5006074138
936	Milti Khola	KO-3-0-09	86.0933999967	27.4998834673
937	Jarke Khola	KO-6-0-09	85.5723876926	27.7826950304
938	Kokaha Khola	KO-0-0-15	87.1655593744	26.8786940148
939	Khimti Khola	KO-3-0-03	86.1127789689	27.4748369218
940	Isuwa Khola	KO-1-0-07	87.2548925597	27.5588234576

S.N.	River Name	River code	X	Y
941	Khare Khola	KO-3-0-06	86.1965188459	27.7593896320
942	Solu Khola	KO-4-2	86.6787914285	27.3657426490
943	Yambling Khola	KO-5-1-06	85.7906091551	27.9517927895
944	Yaksuwa Khola	KO-1-2-04	87.3244575363	27.4367155554
945	Rauje Khola	KO-4-0-09	86.6961793066	27.6199181747
946	Lambu Khola	KO-2-0-07	87.5624473179	27.0627814175
947	Baramchi Khola	KO-5-1-04	85.7721810376	27.8354967073
948	Rakuli Khola	KO-0-0-29	86.7562402962	26.9802194720
949	Khoranga Khola	KO-2-0-08	87.6102083939	27.1096948330
950	Mahadev Khola	KO-4-0-18	86.5984759786	27.2337607873
951	Mahadev Khola	KO-3-0-16	86.0809695303	27.4139860133
952	Indrawati Nadi	KO-6	85.7087459715	27.6363350406
953	Yangkhuwa Khola	KO-1-0-09	87.2041593877	27.2547773479
954	Cha Khola	KO-6-0-05	85.7056711860	27.6406216335
955	Sisne Khola	KO-2-0-26	87.7002413095	27.4268494570
956	Tinekhu Khola	KO-3-0-21	86.1791050108	27.7490717936
957	Solung Khola	KO-0-2-02	86.4346118631	27.3194461644
958	Malapu Khola	KO-1-1-08	87.0005370751	27.2537411521
959	Miya Khola	KO-0-3-03	86.8231285488	27.1743253710
960	Chokti Khola	KO-7-0-10	86.2925473676	27.4755993350
961	Sindhu Khola	KO-6-0-07	85.5727328031	27.7870033715
962	Kharuwa Khola	KO-0-3-04	86.7409500065	27.1178751548
963	Laguwa Khola	KO-1-0-24	87.2239410123	27.2306491992
964	Kusuwa Khola	KO-1-2-06	87.2818396435	27.4001668634
965	Hadi Khola	KO-6-0-06	85.6242358326	27.9090269285
966	Hadi Khola	KO-5-0-05	85.9611285136	27.7826349611
967	Marbu Khola	KO-7-0-07	86.4336304176	27.6085618873
968	Hongu Khola	KO-4-1	86.7262252820	27.4520594111
969	Wachinle Khola	KO-1-1-07	86.9928033103	27.1988306757
970	Palung Khola	KO-2-3-01	87.6186980307	27.5445076404
971	Nyasem Khola	KO-5-1-02	85.7971256140	27.9836737606
972	-	KO-2-3-04	87.5835828025	27.6370738899
973	Poktin Khola	KO-0-2-04	86.4323023312	27.3572477034
974	-	KO-4-1-05	86.9465102852	27.7000531367
975	Tauthali Khola	KO-5-0-04	85.8604642119	27.7549852248
976	Imja Khola	KO-4-0-03	86.7465117367	27.8361492158
977	-	KO-4-0-07	86.7173397945	27.9111701433
978	Tamor Nadi	KO-2	87.1627155062	26.9099601908
979	-	KO-5-0-03	85.7971065225	27.7365548643
980	Tawa Khola	KO-0-3-01	86.8010436067	27.1597171339
981	Patle Khola	KO-2-0-17	87.3328397123	26.9341201420

S.N.	River Name	River code	X	Y
982	Handi Khola	KO-2-1-04	87.9670820421	27.4670490685
983	Behere Khola	KO-1-1-04	87.0619871551	27.1183507876
984	Inkhu Khola	KO-4-0-04	86.7233795321	27.4741366647
985	Malung Khola	KO-0-2	86.3765267497	27.1942764021
986	Mekhu Khola	KO-4-0-17	86.6825986475	27.3751688308
987	Ghatte Khola	KO-0-4-06	85.8400839876	27.5774114552
988	Gongar Khola	KO-3-0-22	86.2185615775	27.8453094254
989	Giddhe Khola	KO-1-2-05	87.3944536678	27.4412570818
990	Sapsup Khola	KO-0-3	86.6996553064	27.0889495182
991	Yangri Khola	KO-6-0-03	85.6361621210	27.9740882981
992	Ghatte Khola	KO-0-0-06	86.5150304291	27.1143775314
993	Golang Khola	KO-0-4-04	85.8808016707	27.6149225099
994	Chirkhuwa Khola	KO-1-0-16	87.1343390706	27.3935413713
995	Khakuwa Khola	KO-1-2-07	87.2333479417	27.3563593945
996	Waphal Khola	KO-0-4-05	85.8733004118	27.6127057717
997	Bhuse Khola	KO-5-0-02	85.7315019802	27.6710728404
998	Induwa Khola	KO-1-0-14	87.3083554157	27.5556282549
999	Deku Khola	KO-4-0-11	86.6781098842	27.5939993915
1000	Sipring Khola	KO-3-0-12	86.2284699436	27.8229298329
1001	Hangraha Khola	KO-1-0-18	87.2169193589	27.1071362237
1002	Kusumlanga Khola	KO-4-0-14	86.7130333910	27.7168722493
1003	Kewa Khola	KO-1-0-21	87.2642641565	27.1776946113
1004	Dolti Khola	KO-3-0-13	86.1053924620	27.6804232483
1005	Waksu Khola	KO-0-0-09	86.1830024617	27.2518352894
1006	Rasuwa Khola	KO-0-0-03	86.7486860160	27.0101187026
1007	Salle Khola	KO-0-0-20	85.7333920902	27.5735031109
1008	Khakuwa Khola	KO-1-0-20	87.1840274206	27.3212169634
1009	Jum Khola	KO-3-0-01	86.2197912428	27.9655160045
1010	Rosi Khola	KO-0-1	85.8193118127	27.4512529128
1011	Chhaude Khola	KO-8-0-09	86.6268503754	26.8953364921
1012	Patnali Khola	KO-0-0-19	87.1470821523	26.8023078493
1013	Khaksewa Khola	KO-2-1-06	87.8724153594	27.4110273247
1014	Phalate Khola	KO-7-0-05	86.2156038974	27.3333749603
1015	Dikhuwa Khola	KO-0-3-02	86.7532326920	27.1479882129
1016	Chepuwa Khola	KO-1-0-25	87.4028213771	27.7406809517
1017	Sailung Khola	KO-0-4-02	85.8859990637	27.6124366329
1018	Sursing Khola	KO-1-0-19	87.3479463401	27.7281677013
1019	Leuti Khola	KO-2-0-14	87.3126993709	26.9307157959
1020	Sepli Khola	KO-0-2-01	86.4385865926	27.3779448851
1021	Nuwa Khola	KO-2-0-23	87.7400779060	27.4889061899
1022	Hangdak Khola	KO-1-0-23	87.3749855106	27.7488282319

S.N.	River Name	River code	X	Y
1023	Lhonak Glacier	KO-2-2-02	88.0325880123	27.8079910317
1024	Dapcha Khola	KO-0-1-04	85.6711938704	27.5160758387
1025	Adheri Khola	KO-0-0-27	86.7634426118	26.9187161197
1026	Kangkhu Khola	KO-4-1-02	86.8717841924	27.5185687525
1027	Kasuwa Khola	KO-1-0-10	87.2912587067	27.5781990681
1028	Bhotekoshi Nadi	KO-5-0-01	85.8927728306	27.7797028368
1029	Irkhuwa Khola	KO-1-0-06	87.1276058499	27.4131182257
1030	Sailung Khola	KO-7-0-14	86.4795522302	27.6890930420
1031	Thakpa Khola	KO-2-0-21	87.7964361251	27.5450389822
1032	Iwa Khola	KO-2-1-01	87.8324966052	27.2838616734
1033	Mangmaya Khola	KO-1-0-13	87.2451653857	27.1273569328
1034	Bandijor Khola	KO-0-0-25	86.0705875880	27.2905351220
1035	Sabha Khola	KO-1-2	87.2081523765	27.2681802371
1036	Bejo Khola	KO-4-1-04	86.8935391430	27.5382709664
1037	Khahare Khola	KO-4-2-05	86.6516969126	27.3732280539
1038	Kawa Khola	KO-1-1-01	87.1242568623	27.0732728874
1039	Phakuwa Khola	KO-1-0-22	87.1738153921	26.9840478851
1040	Kaku Khola	KO-4-0-08	86.6914288464	27.4940720620
1041	Amji Khola	KO-2-1-05	87.9118789469	27.4540946458
1042	Bakang Khola	KO-1-0-11	87.4503727339	27.7820047757
1043	Selang Khola	KO-5-1-07	85.7570245946	27.8607947065
1044	Nawa Khola	KO-2-0-04	87.4939832614	26.9841285561
1045	Jhiku Khola	KO-0-0-02	85.7306620636	27.5831473368
1046	Ranjor Khola	KO-3-0-15	86.0467517609	27.3841430879
1047	Perung Khola	KO-7-0-09	86.4368939530	27.6204618276
1048	Elung Khola	KO-0-2-03	86.4008011560	27.4003975908
1049	Teliya Khola	KO-2-0-11	87.4382317959	26.9716348836
1050	Tawa Khola	KO-2-1-02	87.8616837604	27.3612016842
1051	Nibhu Khola	KO-2-0-06	87.6907754751	27.1434528676
1052	Rate Khola	KO-2-2-08	87.8727582542	27.5679135389
1053	Menthuma Khola	KO-2-0-25	87.7679011164	27.4927958250
1054	Luluwa Khola	KO-0-0-26	86.7644464433	26.9548763624
1055	Pangma Khola	KO-1-2-03	87.2408438872	27.3639932601
1056	Bhotekoshi Nadi	KO-4-0-01	86.7186017266	27.7891702271
1057	Dudhkoshi Nadi	KO-4	86.4335167383	27.1496072983
1058	Devijor Khola	KO-8-0-05	86.8280253118	26.7954916284
1059	Sukajor Khola	KO-3-0-18	86.0449807461	27.3811767437
1060	Lumding Khola	KO-4-0-06	86.7049443615	27.6610807133
1061	Kanchanjungha Glacier	KO-2-2-01	88.0280738925	27.7824385350
1062	Kumbhakarna (jano) Glacier	KO-2-2-04	87.9683214816	27.7205325230

S.N.	River Name	River code	X	Y
1063	Sangkhuwa Khola	KO-1-0-02	87.1401236314	27.4487594969
1064	Yamtari Khola	KO-2-2-03	87.9264081343	27.6585222568
1065	Likhu Khola	KO-7	86.2054833349	27.2505898001
1066	Tilpung Khola	KO-3-0-20	86.1057749470	27.4465080399
1067	Yangma Khola	KO-2-0-01	87.7988806237	27.6620425911
1068	-	S47-0-01-03	83.2312501055	27.5315273540
1069	Tilar Nadi	S47-0-01-01	83.2318852887	27.4310291624
1070	Kothi Nadi	S47-0-01	83.2181744135	27.4173506626
1071	Mutahawa Nala	S47-0-01-02	83.2289627412	27.5223787000
1072	Dengraha Nala	S27-0-01-01	85.4959049208	26.8646666929
1073	Chapani Khola	S27-0-01-02	85.5712070696	27.0724974268
1074	Lakhandehi Nadi	S27-0-01	85.5156778754	26.8153657232
1075	Dayani Khola	S27-0-01-03	85.6645258338	27.1358724662
1076	Lal Nadi	S28-0-01-05	85.1634905451	27.2041203667
1077	Bakaiya Nadi	S28-0-01-01	85.1644867807	27.2040973844
1078	Dhansar Nadi	S28-0-01-03	85.2241055142	27.0903755336
1079	Bhamara Khola	S28-0-01-06	85.1911835581	27.1473166811
1080	Bhakuwa Nadi	S28-0-01-02	85.2458986848	26.7608090165
1081	Kamdai Nadi	S28-0-01-04	85.2710691833	26.8303149462
1082	Lal Bakaiya Nadi	S28-0-01	85.2436488730	26.7476003158
1083	Judi Khola	S08-0-01-05	87.3335363952	26.3654635568
1084	Lohandra Nadi	S08-0-01	87.3501848497	26.3540814565
1085	Judi Khola	S08-0-01-01	87.3273412841	26.4469102231
1086	Kesaula Khola	S08-0-01-03	87.4042353520	26.5420696947
1087	Bhaluwa Khola	S08-0-01-02	87.4370247695	26.7151823451
1088	Sukuna Khola	S08-0-01-04	87.4023721858	26.6436281105
1089	Kala Gad	MA-0-0-11	80.5723274059	29.8945690555
1090	Nilgad Gad	MA-0-0-12	80.3573251986	29.5295877647
1091	Nijang Gad	MA-0-0-15	80.5594277529	29.8645857058
1092	Pangkha Gad	MA-0-0-16	80.9762688247	30.2375930213
1093	Parmoli Gad	MA-0-0-06	80.4071733422	29.5935930384
1094	Pathang Khola	MA-0-0-02	80.6722496398	29.9567753639
1095	Chhachang Khola	MA-0-2-02	80.9978472219	30.1327435670
1096	Kaksyali Gad	MA-2-0-03	80.5771633847	29.5054725840
1097	Gangkhet Khola	MA-0-1-05	80.5190737938	29.1581796682
1098	Doti Gad	MA-2-0-01	80.4060166942	29.3564316823
1099	Gandi Gad	MA-1-0-09	80.6758575239	29.6894911700
1100	Nau Gad	MA-1-0-02	80.6088687721	29.6873769038
1101	Dhole Khola	MA-2-0-06	80.6378093016	29.5267192074
1102	Garma Gad	MA-0-0-05	80.3096352879	29.4845340001
1103	Dhik Gad	MA-1-0-07	80.4641884179	29.6206421487

S.N.	River Name	River code	X	Y
1104	Chhetiganga Gad	MA-1-0-03	80.8788999411	29.8247041010
1105	Nampa Khola	MA-0-2-01	80.8905673811	30.1232015668
1106	Lali Gad	MA-0-0-20	80.4075201340	29.6593190791
1107	Makari Gad	MA-1-0-10	80.8424255224	29.7980494151
1108	Api Khola	MA-0-0-08	80.8462077476	30.1055823535
1109	Agadi Gad	MA-2-0-02	80.5402070292	29.4492306342
1110	Agari Gad	MA-1-0-17	80.5590598111	29.6733358461
1111	Bakot Gad	MA-2-0-07	80.4730190341	29.4354251794
1112	Matela Gad	MA-0-0-19	80.2720660525	29.3708878558
1113	Kalena Khola	MA-0-1-06	80.3875407342	29.1317290847
1114	Kulau Khola	MA-0-0-22	80.2936125788	29.2342716310
1115	Kuledi Khola	MA-0-1-04	80.5119266797	29.1570572229
1116	Lasku Khola	MA-0-0-13	80.5521123704	29.8497009994
1117	Lilinti Khola	MA-0-0-21	80.9175272717	30.2256743526
1118	Baku Gad	MA-0-0-18	80.3844983476	29.6858001224
1119	Dongkang Khola	MA-0-2-03	80.9983020654	30.1332292445
1120	Gokule Gad	MA-1-0-15	80.5390076855	29.6656328190
1121	Jogbuda Nadi	MA-0-0-01	80.1135783082	28.8295507568
1122	Sirse Gad	MA-0-0-04	80.2862172081	29.1952336576
1123	Runighat Gad	MA-2-0-05	80.5770344763	29.5114839867
1124	Rangun Khola	MA-0-1	80.2737401691	29.1443653632
1125	Ratyadi Gad	MA-2-0-08	80.3628100257	29.3332289045
1126	Baniyal Khola	MA-0-1-03	80.5191331873	29.1578569673
1127	Rithe Gad	MA-1-0-13	80.5252667088	29.6590402706
1128	Rugru Gad	MA-1-0-06	80.8150143459	29.7841986029
1129	Rupali Gad	MA-0-0-10	80.3095475124	29.2896859943
1130	Sadani Khola	MA-0-0-07	80.2382301287	29.1210300333
1131	Chamaliya Nadi	MA-1	80.4094302005	29.5973809704
1132	Shyadi Gad	MA-2-0-04	80.4897342529	29.4438354433
1133	Ghatte Khola	MA-0-2-04	80.9791545509	30.1334516250
1134	Rokhab Gad	MA-1-0-08	80.9462490327	29.9039691745
1135	Thali Gad	MA-0-0-14	80.4927877418	29.7952136886
1136	Tingkar Khola	MA-0-2	80.8733119107	30.1255637013
1137	Nwa Gad	MA-1-0-05	80.7996758372	29.7511904375
1138	Chhumchhum Gad	MA-1-0-04	80.8423496227	29.8037979123
1139	Jamadi Gad	MA-1-0-01	80.5071941270	29.6390659547
1140	Tilkeni Khola	MA-0-0-17	80.1147159653	28.9681938737
1141	Thadgadi Gad	MA-1-0-12	80.9513662637	29.9561996974
1142	Sun Khola	MA-0-1-02	80.4816612305	29.1308881239
1143	Surnaya Gad	MA-2	80.3172979099	29.3142725829
1144	Tampa Khola	MA-0-0-03	80.7584063564	30.0272036424

S.N.	River Name	River code	X	Y
1145	Bhabiya Gad	MA-1-0-11	80.9442963160	29.9257887579
1146	Bhartola Gad	MA-0-0-09	80.3967389383	29.7641266691
1147	Mahakali Nadi	MA	80.1133140024	28.8189062419
1148	Thadiul Gad	MA-1-0-14	80.9428659426	29.9649868405
1149	Puntura Khola	MA-0-1-01	80.3289310774	29.1396055498
1150	Gola Gad	MA-1-0-16	80.8989824449	29.8551901007
1151	Maraha Nadi	S24-0-00-01	85.7122912326	26.8262290315
1152	Achhariya Nala	S52-0-01-05	81.5896941174	28.2408571745
1153	Man Khola	S52-0-01	81.5060596776	28.0684395460
1154	Kiran Nala	S52-0-01-01	81.5135888630	28.0685213822
1155	Reu Khola	S52-0-01-03	81.5347209240	28.1989023913
1156	Dundawa Khola	S52-0-01-04	81.5608802333	28.2132143064
1157	Jethan Nala	S52-0-01-02	81.5047174031	28.1282471984
1158	Kareli Khola	S52-0-01-06	81.6472355840	28.2682668053
1159	Marthi Nadi	S48-0-00-01	83.1759782224	27.4554490370
1160	Hadiya Khola	ME-I(MN)-0-0-01	88.1072349793	26.5656761391
1161	Siddhi Khola	ME-I(MN)-0-0-04	88.1714532900	26.8259391152
1162	Deuniya Khola	ME-I(MN)-0-0-02	88.0957980011	26.4790125495
1163	Mechi Nadi	ME-I(MN)	88.0328340163	26.3614735613
1164	Paliya Khola	ME-I(MN)-0-0-05	88.1262540871	26.6020079990
1165	Kala Khola	S53-1-03-01	80.6519140825	28.8543091497
1166	Kandri Nadi	S53-1-02-02	80.9063739051	28.7232108868
1167	Arbarwa Nala	S53-1-01-03	81.0439766419	28.4790166321
1168	Bauniya Nala	S53-1-01-05	81.0484958496	28.5348454139
1169	Mohana Nadi	S53-1	81.0280129620	28.4042978700
1170	Charaila Khola	S53-1-01-06	81.0583341454	28.6246791618
1171	Godavari Nadi	S53-1-00-03	80.5392628885	28.7944059990
1172	Chori Khola	S53-1-01-02	81.0667402231	28.5861422646
1173	Doda Nadi	S53-1-02-01	80.9328839775	28.5992751629
1174	Ghuraha Nala	S53-1-00-01	80.7564752892	28.5794488434
1175	Tudela Nadi	S53-1-00-06	80.5106735595	28.8316976490
1176	Khutiya Nadi	S53-1-03	80.6509611321	28.6360836608
1177	Shiva Ganga Nadi	S53-1-02-03	80.9075788256	28.7223081275
1178	Kulariya Nala	S53-1-01-04	81.0606278821	28.5474808513
1179	Manahara Nadi	S53-1-00-04	80.5455754568	28.7862577839
1180	Roda Khola	S53-1-01-07	81.0663372937	28.5715439100
1181	Shiva Ganga Nadi	S53-1-03-02	80.6741821596	28.6978692632
1182	Sharma Nadi	S53-1-00-02	80.8787627898	28.5113799868
1183	Sukuti Nala	S53-1-00-09	80.5956472374	28.6853922233
1184	Suni Khola	S53-1-00-08	80.5507629044	28.7782126823
1185	Surmi Nala	S53-1-00-05	80.7888581775	28.5496262578

S.N.	River Name	River code	X	Y
1186	Karha Nadi	S53-1-01-01	81.0170819613	28.4568075911
1187	Pathari Nadi	S53-1-01	81.0170501921	28.4521223187
1188	Kandra Nadi	S53-1-02	80.9900708831	28.4485342118
1189	Kailali Nala	S53-1-00-07	80.5902073786	28.6809423164
1190	Tengna Nadi	S53-1-02-04	80.9167944439	28.7100345259
1191	Munahara Nadi	S19-0-00-01	86.3960703567	26.5878741302
1192	Odar Khola	S39-0-00-01	84.6448814266	27.3041041094
1193	Pasaha Nadi	S31-0-00-01	84.9725777253	26.9298481468
1194	Gam Khola	WR-I(KA)-1-1-06	82.8465093004	28.3610414409
1195	Chudari Khola	WR-I(KA)-2-0-07	82.8963849802	28.1265205391
1196	Syano Khola	WR-I(KA)-0-0-07	82.5555302397	27.8386572107
1197	Rangle Khola	WR-I(KA)-0-0-12	82.8078122803	27.8595093318
1198	Mahatini Khola	WR-I(KA)-0-0-14	82.3506332260	27.8923966855
1199	West Rapti Nadi	WR-I(KA)	81.7967375382	27.9106933923
1200	Rangsing Khola	WR-I(KA)-0-0-04	82.7313643444	27.8229946482
1201	Phagam Khola	WR-I(KA)-1-1-01	82.7319003964	28.2497114925
1202	Oli Khola	WR-I(KA)-1-0-12	82.5086141018	28.4059795901
1203	Muguwa Khola	WR-I(KA)-0-0-09	81.8392873819	28.0707548220
1204	Moranga Khola	WR-I(KA)-0-0-10	81.8854194202	28.0432815444
1205	Lungri Khola	WR-I(KA)-1-1	82.6862169956	28.1847748579
1206	Rihar Khola	WR-I(KA)-0-0-22	82.3375464343	27.8973702017
1207	Darbhan Khola	WR-I(KA)-0-0-28	82.8318888273	27.9070634091
1208	Arjun Khola	WR-I(KA)-0-0-01	82.4772771930	27.8448618432
1209	Bojyang Khola	WR-I(KA)-1-1-03	82.7395299507	28.2587905036
1210	Chhap Khola	WR-I(KA)-2-0-02	82.9542568297	27.9977788673
1211	Chhirling Khola	WR-I(KA)-2-0-05	83.0159478952	27.9371077410
1212	Chiura Khola	WR-I(KA)-1-0-03	82.5057951979	28.3956924594
1213	Agrang Khola	WR-I(KA)-1-0-01	82.7900521283	28.0343453385
1214	Chunbang Khola	WR-I(KA)-1-0-06	82.5243896218	28.4753809669
1215	Dangdung Khola	WR-I(KA)-1-0-04	82.5255186218	28.4751338722
1216	Bhiting Khola	WR-I(KA)-1-0-11	82.7351540486	28.1272380621
1217	Bane Khola	WR-I(KA)-1-0-10	82.8082274064	28.0061997291
1218	Bhaisahi Khola	WR-I(KA)-0-0-16	82.2303416704	27.9386700124
1219	Bangsiri Khola	WR-I(KA)-2-0-08	83.0141366638	27.9221099674
1220	Dhangsi Khola	WR-I(KA)-1-0-05	82.6007081074	28.3361540887
1221	Bhaukahawa Khola	WR-I(KA)-0-0-20	82.3908392825	27.8884671620
1222	Khabri Khola	WR-I(KA)-0-0-08	82.4936584975	27.8393161401
1223	Ghor Khola	WR-I(KA)-1-0-08	82.6812981173	28.1921721192
1224	Gartang Khola	WR-I(KA)-2-0-03	82.9562306998	28.1415637584
1225	Ganaha Khola	WR-I(KA)-0-0-06	82.8042813948	27.8783551550
1226	Gaja Khola	WR-I(KA)-1-1-04	82.8463107406	28.3617338500

S.N.	River Name	River code	X	Y
1227	Gabar Khola	WR-I(KA)-0-0-26	82.0267978473	28.0095597054
1228	Kanera Khola	WR-I(KA)-2-0-09	82.8257957068	28.0556690182
1229	Jumri Khola	WR-I(KA)-2-0-04	82.8471408377	28.0890416001
1230	Ghusbang Khola	WR-I(KA)-1-1-02	82.8089216248	28.3705560078
1231	Khairi Khola	WR-I(KA)-0-0-11	81.9193398744	28.0461699053
1232	Lung Khola	WR-I(KA)-2-0-01	82.9095491024	28.1482330888
1233	Lumba Khola	WR-I(KA)-0-0-27	81.9714821389	28.0323741396
1234	Lomarari Khola	WR-I(KA)-0-0-13	82.4270474847	27.8609110883
1235	Kochhap Khola	WR-I(KA)-1-0-07	82.6387452123	28.2310337433
1236	Khoche Khola	WR-I(KA)-0-0-19	82.0726635657	28.0131144745
1237	Khar Khola	WR-I(KA)-2-0-06	83.0448933164	28.2689742135
1238	Gurung Khola	WR-I(KA)-0-0-15	82.4806894102	27.8357387105
1239	Judhung Khola	WR-I(KA)-1-1-05	82.7322377243	28.2461202777
1240	Kharanga Khola	WR-I(KA)-0-0-21	82.3988747744	27.8721790922
1241	Duduwa Khola	WR-I(KA)-0-0-03	81.7258451635	27.9901634469
1242	Hungri Khola	WR-I(KA)-1-0-09	82.5996974085	28.3462633082
1243	Sukhar Khola	WR-I(KA)-0-0-18	81.9415753726	28.0472305307
1244	Sibang Khola	WR-I(KA)-1-0-02	82.5798470061	28.2786455267
1245	Sunpathari Khola	WR-I(KA)-0-0-24	82.2301815686	27.9356251162
1246	Sit Khola	WR-I(KA)-0-0-05	82.9155837237	27.9035680724
1247	Jhimruk Khola	WR-I(KA)-2	82.9427291627	27.9309007036
1248	Jhuri Khola	WR-I(KA)-0-0-23	81.9489281553	28.0469658310
1249	Madi Khola	WR-I(KA)-1	82.9421518719	27.9314216809
1250	Sikrahawa Khola	WR-I(KA)-0-0-25	82.5149362332	27.8389181422
1251	Simalkota Khola	WR-I(KA)-0-0-17	82.2181728593	27.9539268407
1252	Jhijhari Khola	WR-I(KA)-0-0-02	81.7234517618	28.0831160718
1253	Ratu Nadi	S23-0-01	85.7626790837	26.6344281304
1254	Angkuse Nadi	S23-0-01-01	85.7947357476	26.7034900731
1255	Badahari Khola	S23-0-01-02	85.8704221729	26.8642432191
1256	Mawa Khola	S05-0-01-01	87.6419407929	26.5690379014
1257	Ratuwa Khola	S05-0-01	87.6656695605	26.4117103849
1258	Chanju Khola	S05-0-01-02	87.7174697301	26.6767156500
1259	Rohini Nadi	S44-0-00-01	83.4902393995	27.4751854798
1260	Satbudri Nala	S42-0-00-01	83.7452053770	27.4102377167
1261	Shikaribas Khola	S38-0-00-01	84.6559257769	27.2837607464
1262	Sikta Nadi	S36-0-00-01	84.7024166777	27.0266787416
1263	Singgiya Nadi	S09-0-00-01	87.3089537830	26.3699671937
1264	Sirsiya Nadi	S33-0-00-01	84.8576656701	26.9884188292
1265	Kakro Nala	S12-0-01-01	87.1236604435	26.6164633822
1266	Sunsari Khola	S12-0-01	87.0886842875	26.4674143769
1267	Serha Khola	S12-0-01-03	87.1147001213	26.6345984269

S.N.	River Name	River code	X	Y
1268	Surai Khola	S50-0-00-01	82.8097558708	27.4981409129
1269	Thute Khola	S40-0-00-01	84.6154484829	27.3375136547
1270	Tilabe Nadi	S34-0-01	84.8088418903	27.0137108629
1271	Jamuniya Nadi	S34-0-01-01	84.8483267611	27.1609015206
1272	Phanti Khola	S34-0-01-03	84.8568058449	27.0841528379
1273	Bhedaha Nadi	S34-0-01-02	84.8509676571	27.0680537326
1274	Tiluga Nadi	S13-0-00-01	86.7850999296	26.4531937029
1275	Tapaha Khola	TI-I(KA)-0-1-05	83.3466233045	27.5108103235
1276	Sukahi Nadi	TI-I(KA)-0-1-04	83.3330152917	27.5776318280
1277	Siyari Nadi	TI-I(KA)-0-1-03	83.3477846606	27.5256809588
1278	Inguriya Khola	TI-I(KA)-0-1-01	83.3332274941	27.6137438414
1279	Kanchan Nadi	TI-I(KA)-0-1-02	83.3218361891	27.5941360333
1280	Jhumsa Khola	TI-I(KA)-0-0-02	83.5061825060	27.7494255930
1281	Tinau Nadi	TI-I(KA)	83.2574526244	27.3948417005
1282	Hulandi Khola	TI-I(KA)-0-0-03	83.5480625656	27.7942899926
1283	Dobhan Khola	TI-I(KA)-0-0-01	83.4606237372	27.7463464001
1284	Dano Nadi	TI-I(KA)-0-1	83.3263864405	27.4389106797
1285	Tiyar Nadi	S30-0-00-01	85.0236032441	26.8549155928
1286	Trishula Nadi	S20-0-00-01	86.3408430689	26.6062662490
1287	Uriya Nadi	S37-0-00-01	84.6714422815	27.0359007807
1288	Sunkoshi_Upper	KO-5	85.7091074708	27.6366707607
1289	Trishuli_Upper	GA-2	84.7835818209	27.8140325831
1290	Dattakicha Khola	S12-0-01-02	87.1265586110	26.6115693050

Annex 25: Basins in Nepal

S.N	River Name	River Level	Total Drainage Area (km ²)	Area within Nepal (km ²)	Hydrologic Unit Name	Hydrologic Unit Code
1	Karnali	1	46,193	43,153	Basin	KA
2	Gandaki	1	36,497	32,148	Basin	GA
3	Koshi	1	55,650	27,440	Basin	KO
4	West Rapti	1	6,454	6,454	Independent Basin	WR-I(KA)
5	Mahakali	1	15,942	5,254	Basin	MA
6	Bagmati	1	3,815	3,815	Independent Basin	BG-I(KO)
7	Babai	1	3,422	3,422	Independent Basin	BA-I(KA)
8	Kamala	1	2,084	2,084	Independent Basin	KM-I(KO)
9	Kanakaimai	1	1,459	1,459	Independent Basin	KN-I(KO)
10	Tinau	1	1,145	1,145	Independent Basin	TI-I(KA)
11	Mechi	1	857	705	Independent Basin	ME-I(KO)

Annex 26: Sub-basins in Nepal

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1	Sharada Khola	2	Babai	978	978	BA-I(KA)-1
2	Trishuli Nadi	2	Gandaki	6,607	3,631	GA-2
3	Budhi Gandaki Nadi	2	Gandaki	4,995	3,607	GA-3
4	East Rapti Nadi	2	Gandaki	3,035	3,035	GA-5
5	East Seti Nadi	2	Gandaki	2,936	2,936	GA-6
6	Kali Gandaki Nadi	2	Gandaki	11,878	11,798	GA-1
7	Marsyangdi Nadi	2	Gandaki	4,772	4,772	GA-4
8	Humla Karnali Nadi	2	Karnali	9,104	5,967	KA-2
9	Kawadi Khola	2	Karnali	818	818	KA-8
10	Lohare Khola	2	Karnali	1,017	1,017	KA-6
11	Mugu Karnali Nadi	2	Karnali	5,314	5,314	KA-4
12	West Seti Nadi	2	Karnali	7,370	7,370	KA-3

S.N.	Name of Sub-Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
13	Thuli Gad	2	Karnali	890	890	KA-7
14	Tila Nadi	2	Karnali	3,320	3,320	KA-5
15	Bheri Nadi	2	Karnali	13,626	13,626	KA-1
16	Sunkoshi Nadi	2	Koshi	3389	1395	KO-5
17	Indrawati Nadi	2	Koshi	1227	1227	KO-6
18	Tamor Nadi	2	Koshi	6051	6051	KO-2
19	Trijuga Nadi	2	Koshi	736	736	KO-8
20	Arun Nadi	2	Koshi	29890	5138	KO-1
21	Tamakoshi Nadi	2	Koshi	4121	2675	KO-3
22	Likhu Khola	2	Koshi	1048	1048	KO-7
23	Dudhkoshi Nadi	2	Koshi	4053	4053	KO-4
24	Chamaliya Nadi	2	Mahakali	1590	1590	MA-1
25	Surnaya Gad	2	Mahakali	835	835	MA-2
26	Mohana Nadi	1	Mohana	2508	2508	S53-1
27	Jhimruk Khola	2	West Rapti	1038	1038	WR-I(KA)-2
28	Madi Khola	2	West Rapti	2347	2347	WR-I(KA)-1

Annex 27: Watersheds in Nepal

S.N.	Name of Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
1	Badahar Nadi	1	Badahar	322	322	S21-0-16
4	Jhanjh Nadi	2	Bagmati	330	330	BG-I(KO)-0-3
2	Kakhajor Khola	2	Bagmati	355	355	BG-I(KO)-0-2
3	Marin Khola	2	Bagmati	538	538	BG-I(KO)-0-1
5	Bakara Nuna Nadi	1	Bakara-Nuna	394	394	S06-0-12
6	Bakraha Nadi	1	Bakraha	473	473	S07-0-08
7	Balan Nadi	1	Balan	439	439	S18-0-10
8	Banaganga Nadi	1	Banagan-ga	995	995	S49-0-01
9	Bigahi Nadi	1	Bigahi	902	902	S22-0-02
10	Biring Nadi	1	Biring	361	361	S02-0-13
11	Budhi Khola	1	Budhi	305	305	S10-0-19
12	Chaudara Nadi	1	Chaudara	485	485	S55-0-06
13	Doda Nadi	1	Doda	835	835	S54-0-04
19	Madi Nadi	3	Gandaki	1117	1117	GA-6-1
17	Daraundi Nadi	3	Gandaki	606	606	GA-4-2

S.N.	Name of Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
25	Nar Khola	3	Gandaki	881	881	GA-4-1
14	Syar Khola	3	Gandaki	640	640	GA-3-2
16	Akhu Khola	3	Gandaki	748	748	GA-3-1
24	Langtang Khola	3	Gandaki	578	578	GA-2-2
15	Tadi Khola	3	Gandaki	663	663	GA-2-1
21	Ridi Khola	3	Gandaki	598	598	GA-1-4
23	Modi Khola	3	Gandaki	672	672	GA-1-3
20	Myagdi Khola	3	Gandaki	1089	1089	GA-1-2
22	Badigad Khola	3	Gandaki	1986	1986	GA-1-1
18	Binayi Khola	2	Gandaki	327	327	GA-0-1
26	Jharahi-Bhaluhi Nadi	1	Jharahi	315	315	S43-0-17
27	Chadaha Khola	2	Kamala	306	306	KM-I(KO)-0-2
28	Tawa Khola	2	Kamala	476	476	KM-I(KO)-0-1
31	Juwa Nadi	3	Karnali	549	549	KA-5-2
29	Hima Nadi	3	Karnali	807	807	KA-5-1
35	Mugu Khola	3	Karnali	766	766	KA-4-2
37	Namlang Nadi	3	Karnali	3530	3530	KA-4-1
32	Kalanga Nadi	3	Karnali	558	558	KA-3-2
41	Budhi Ganga Nadi	3	Karnali	1739	1739	KA-3-1
33	Limi Khola	3	Karnali	1146	1146	KA-2-3
43	Chuwa Khola	3	Karnali	1300	1300	KA-2-2
34	Loti Karnali Nadi	3	Karnali	1304	1304	KA-2-1
30	Jagdula Khola	3	Karnali	514	514	KA-1-5
36	Nalsyagu Khola	3	Karnali	680	680	KA-1-4
42	Chhera Khola	3	Karnali	1016	1016	KA-1-3
38	Sani Bheri Nadi	3	Karnali	2725	2725	KA-1-2
39	Thuli Bheri Nadi	3	Karnali	4439	4439	KA-1-1
40	Orai Khola	2	Karnali	309	309	KA-0-1
51	Balephi Khola	3	Koshi	683	683	KO-5-1
50	Solu Khola	3	Koshi	533	533	KO-4-2
46	Hongu Khola	3	Koshi	604	604	KO-4-1
52	Mewa Khola	3	Koshi	580	580	KO-2-3
48	Ghunsa Khola	3	Koshi	743	743	KO-2-2
54	Kabeli Nadi	3	Koshi	887	887	KO-2-1
47	Sabha Khola	3	Koshi	551	551	KO-1-2
49	Pikhuwa Khola	3	Koshi	584	584	KO-1-1
55	Chauri Khola	2	Koshi	327	327	KO-0-4

S.N.	Name of Watershed	River Level	Basin	Total Drainage Area (km ²)	Area within Nepal (km ²)	Code
44	Sapsup Khola	2	Koshi	358	358	KO-0-3
45	Malung Khola	2	Koshi	411	411	KO-0-2
53	Rosi Khola	2	Koshi	562	562	KO-0-1
56	Kothi Nadi	1	Kothi	303	303	S47-0-20
57	Lakhandehi Nadi	1	Lakhandehi	313	313	S27-0-18
58	Lal Bakaiya Nadi	1	LalBakaiya	852	852	S28-0-03
59	Lohandra Nadi	1	Lohandra	330	330	S08-0-15
61	Tingkar Khola	2	Mahakali	344	344	MA-0-2
60	Rangun Khola	2	Mahakali	478	478	MA-0-1
62	Man Khola	1	Mankhola	624	624	S52-0-05
65	Kandra Nadi	2	Mohana	495	495	S53-1-02
63	Khutiya Nadi	2	Mohana	321	321	S53-1-03
64	Pathari Nadi	2	Mohana	642	642	S53-1-01
66	Ratu Nadi	1	Ratu	480	480	S23-0-07
67	Ratuwa Khola	1	Ratuwa	356	356	S05-0-14
68	Sunsari Khola	1	Sunsari	432	432	S12-0-11
69	Tilabe Nadi	1	Tilabe	445	445	S34-0-09
70	Dano Nadi	2	Tinau	458	458	TI-I(KA)-0-1
71	Lungri Khola	3	West Rapti	636	636	WR-I(KA)-1-1

