JOINT INSPECTION REPORT OF JCIFM's SUB-GROUP ON INUNDATION AND FLOOD MANAGEMENT ISSUES IN BORDERING AREAS OF NEPAL AND INDIA.

(June 26th -30th, 2018)

The Indo-Nepal Joint Sub-group was formed by the resolutions of Twelfth meeting of JCIFM, held in Kathmandu in 2018 to inspect the sites along the Indo-Nepal border having flood and inundation problems so as to suggest possible solutions for consideration of JCIFM.

This joint inspection of Sub-group was held from June 26-30, 2018. The Nepali delegation was led by Mr. Pradeep Thapa, Deputy Director General of the Department of Water Induced Disaster Management (DWIDM), Government of Nepal and Member Secretary (N) of JCIFM and the Indian delegation was led by Mr. Ajay Kumar, Director, Ganga Flood Control Commission (GFCC), Government of India and Member Secretary (I) of JCIFM.

The Team Leader of the Nepali delegation welcomed the Indian delegation in Rajbiraj (Saptari district of Nepal) on June 26, 2018 and shortly briefed about five days long schedule of visiting sites of inundation and bank erosion along the Indo-Nepal border in Nepali territory. The Team leader of Indian delegation thanked Nepali side for extending such warm hospitality and remarked that this is the broader step of continuous effort made by both the countries to manage the flood water utterly for the benefit of people of both the countries and develop even more consolidated confidence.

The following river banks were inspected, issues were identified and possible solutions were explored:

KHANDO RIVER (TILATHI, NEPAL and KUNAULI, INDIA):

The Sub-group visited the Khando river at Indo-Nepal border on 27th of June, 2018 and interacted with the local inhabitants of Nepal and India. The tributary of Khando i.e. Jeeta river, coming from north, which is called TRIJUGA in upper reach, was also inspected. The committee walked throughout the old channel of river Khando starting from no-man's land (near graveyard) up to its confluence with Bhaluwahi river (near suspension bridge). It was observed that Khando river has been completely silted up to length of about 2 km in Indian territory and has taken the course of Jitadhar during low flow condition. Whereas, the river Khando flows through the Kunauli bajar during high flow condition causing inundation in Kunauli (India) as well as Tilathi (Nepal). Considerable area of agricultural land has been silted up. The member of Sub-group interacted with the local people and enquired about the damages occured due to the Khando river flood in the past years. The members of Sub-group visited to the Nepali territory near Jeeta river, crossing the Indo-Nepal border at the broken bund of India. It was reported that the construction of left and right embankment on Khando river from East-West highway to border is going on creating a defined channel of the river.

Sh

A

Issues: Due to non-availability of any defined channel of Khando river along the Indo-Nepal border, it causes flooding in the villages including those of Kunauli Bazar of Indian side. Hence, Indian side was forced to make low height bund along the border causing inundation in the upstream Nepali territory. This has become a cause of conflict between the people of both countries every year.

Possible Solution:

The channel of river Khando may be defined in line of Nepal up its confluence with river Bhaluahi. In addition to that the flow of JEETA may be redirected to Khando river near graveyard.

2. KAMLA RIVER (INERWA, NEPAL and JAYNAGAR, INDIA):

The Sub-group visited this site on 27th of June, 2018 in post lunch session and inspected the left embankment at Zero RD near Siraha, Nepal, the gap portion near noman's land and the left embankment up to Jaynagar Bridge in India. Interaction with the people of both the countries was also made.

Issues: Due to non-construction of embankment near Indo-Nepal border, flood water passes through the gaps causing inundation in large area in Nepal and India near border during every rainy season. It was reported that tender for construction of embankment in the above mentioned has already been awarded.

Possible Solution: The construction of embankment near Indo-Nepal border may be completed at the earliest.

CONFLUENCE OF MAINABATI and GAGAN RIVER, LANGDI GOTH, SIRAHA MUNICIPALITY WARD NUMBER-21, NEPAL:

The Sub-group visited this site on 27th of June, 2018 in post lunch session and inspected the persisting inundation problem and interacted with the people of both the countries.

Issues: The Mainabati river and Gagan river meets about one kilometer upstream from Indo-Nepal border and it crosses Indo-Nepal border and passes through road bridge on Jayanagar-Khutauna road. It was reported that due to small opening provided in the road bridge, the combined discharge of Mainabati and Gagan river, does not pass in short time causing inundation in the Nepali territory.

Findings: During the visit of Sub-group, it was observed that construction of new RCC bridge was going on to replace the small old bridge. It was noted that proposed opening of the new bridge (under construction) would be enough to pass the flood water without causing any inundation in Nepali territory. However, it was informed by the Indian side the discharge capacity of new bridge will be confirmed by the concerned project authority and the same will be communicated to Nepali side.

ysh,

RATO RIVER(JALESHWOR, NEPAL and BHITTAMORE, INDIA):

On 28th June, 2018 the Sub-group started from Janakpurdham, Nepal travelled to Bhittamore in the no-mans land and walked through the Bhittamore bazar, Bihar to the bridge of Rato river, situated in the east of Bazar. Then the sub-group walked through the left embankment (which is continuous from Nepal to India) and interacted with SSB personnel, local people and garnered the information and difficulties being faced by them during the flood season.

The right and left embankments in Nepali territory is constructed by the government of Nepal by People's Embankment Program office No.-2, Jaleshwor which reached up to the no-mans land. The left embankment of Indian side has been joined with the left embankment of Nepal but the right bank is not yet connected with the right embankment of Nepal causing flood in right bank covering whole Bhittamore bazar as well as inundation in Nepal.

Issues: Due to incomplete work of tagging of right embankment of India and Nepal, in every rainy season the flood water rolls back to Nepali territory and submerges all the important government offices in Nepal. The flood water submerges the entire Bhittamore market, which is a densely populated area including SSB camp and Customs office in the Indian side. The opening of existing bridge on Bhittamore-Madhubani road is insufficient to pass flood water causing inundation problem in Nepali territory.

Possible Solution: The construction of right embankment in Indian side with AFS at suitable location should be expedited and tagging of embankment may be completed at the earliest.

5. LAKHANDEHI RIVER (PAKARI-BARA-UDHORAN, NEPAL and MUDAHA, INDIA):

In the post lunch session on 28th June, 2018, the Sub-group visited the existing Jamindari embankment in Indian territory near Pakari, Bara-Udhoran village (near Indo-Nepal border). Then walked all through earthen embankment and inspected the small AFS whose gate was found missing. The Sub-group gathered in the nearby SSB office compound and enquired with the SSB personnel and local people.

Issues: It was reported that flooding of the area has been checked after construction of Lakhandehi embankment. However, the sheet flow of Lakhandehi river has been obstructed by earthen bund causing inundation in Nepali territory due to insufficient passage of water resulting into damage of crops. It impacts severely the socio-economic status of the concerned Nepali people.

Possible Solution: Additional AFS may be provided in the existing embankment, one at MURHAGHAT THANA NO.2, near SSB camp and second at east of Madhopur-Bara Udhoran road.

y Py

3 | Page

6. Right Embankment of Lal Bakeya River: The Sub-group visited the right embankment of Lal Bakeya river, at the joining point of Indian and Nepali embankment near BANJARAHA village of Nepali side and GUHABARI village of Indian side on 29th June 2018. Then travelled up to the Dhaka irrigation weir head works and Railway bridge sites in the Indian territory.

Issues: It was observed that two number of AFS (one completed and another to be constructed) have been provided in Lalbakeya Right embankment in Nepali territory. Whereas, the construction of embankment surrounding Guhabari village in Indian side has been done without providing any opening for the old course of the drainage channel. This has created inundation problem in Nepali territory. The existing bridge on railway line as well as on Guhabari-Bhawanipur road in between the earthen embankment and railway bridge show trace of the old course of channel.

Possible Solution: Possibility of providing opening on the embankment in line of existing railway bridge and Guhabari-Bhawanipur road bridge may be explored.

Connection of Right Embankment of Bagmati River:

The Sub-group visited the right embankment of Bagmati river, near the no-mans land and inspected the area. The right bank has been terminated at the no-man's area and the further construction on Indian side has not commenced. This causes inundation problem in the Nepali territory and submerges the BRAHMPURI village of Nepal. The committee visited existing BAIRGINIYA RING BUND and gathered the information about the joining point of Bagmati right bank in Indian territory.

Issues: The onward embankment on the Indian side needs to be constructed which would tag the existing embankment in Nepal with the ring bund of Bairginiya.

Possible Solution: The construction work of right embankment in Indian side should be expedited and to be jointed with embankment of Nepal which has terminated at the noman's land.

The joint inspection was carried out in a cordial and friendly atmosphere. List of the participants is attached as Annexure-I and the Photographs of visited sites as Annexure-II.

Signed on June 30, 2018 at ICHCHA HOTEL, Simara, Nepal.

(Pradeep Thapa)

Deputy Director General
Dept. of Water Induced Disaster
Management (DWIDM), Kathmandu
& Team Leader- Nepal

(Ajay Kumar)

Director

Ganga Flood Control Commission (GFCC), Patna

& Team Leader- India

FIRST JOINT INSPECTION OF SUB-GROUP (26 to 30 JUNE, 2018) LIST OF PARTICIPANTS

INDIAN SIDE:

- 1. Mr. Ajay Kumar, Director, GFCC, Patna-Team Leader
- 2. Mr. R. K. Chaurasia, SE, FCC, Dharbhanga- Member
- 3. Mr. Rabindra Kumar, SE, FCC, Sitamarhi Member
- 4. Mr. Sanjay Kumar, Deputy Director, GFCC, Patna- Member and
- 5. Mr. Kapidhwaja Singh, Under Secretary, Embassy of India, Kathmandu- Member

NEPALI SIDE:

- 1. Mr. PradeepThapa, Deputy Director General, DWIDM, Kathmandu -Team Leader
- 2. Mr. Arvind Kumar Gupta, Senior Divisional Engineer, DWIDM, Kathmandu- Member
- 3. Mr. Ramesh Prasad Poudel, Ministry of Energy, Water Resources and Irrigation(MoEWRI), Kathmandu Member

SPECIAL INVITEES:

- 1. Mr. Ashok Raj Gautam, Engineer, DWIDM, Kathmandu
- 2. Mr. Yogendra Mishra, Senior Divisional Engineer, MoEWRI, Kathmandu

Annexure-II

FIRST JOINT INSPECTION OF SUB-GROUP (26 to 30 JUNE, 2018) PHOTOGRAPHS OF SITE VISIT



Fig.-1.1: Flow of River Khando to Jita river due to siltation of Khando river course



Fig.-1.2: Old course of Khando river



Fig.-1.3: Confluence of Khando river with Bhaluahi river



Fig.-1.4: Team Members and Local People near Khando river



Fig.-1.5: Construction of Road bridge on Khando river in Nepal



Fig.-1.5: Siltation on agricultural land of Kunauli, India by Khando river



Fig.-2.1: Gap after Zero RD of Kamla Left Embankment near No-mans land



Fig.-2.1: Visit of Joint team to Kamla Left Embankment near No-mans land



Fig.-3.0: Mainabati river near Jogia on Jaynagar-Khutauna road



Fig.-4.1: Rato Left Embankment near Bhittamore-Sitamarhi road



Fig.-4.2: Bhittamore bazaar at the mercy of Rato river



Fig.-4.3: Team Members and Local People on Rato Left Embankment



Fig.-5.1: Jamindari Embankment in India near Bara-Udhoran village, Nepal



Fig.-5.2: Small AFS on Jamindari Embankment near Bara-Udhoran village, Nepal



Fig.-6.1: Gated AFS on Lalbakeya Right Embankment near border



Fig.-6.2: Existing Culvert on Guhabari-Bhawanipur road in India



Fig.-6.3: Jamindari Embankment near Guhabari (India) & Banjaraha (Nepal)



Fig.-6.4: Embankment protection work near Banjaraha village Nepal



Fig.-7.1: Zero RD of Bagmati Left Embankment in Nepal portion



Fig.-7.2: Joint Team members at Bagmati Left Embankment in Nepal portion