

**SUMMARY REPORT ON
WORKSHOP ON PROJECT INFORMATION DISSEMINATION
AND
STAKEHOLDER MEETING
FOR FLOOD CONTROL MASTER PLAN PREPARATION
13 March, 2024**



In the watersheds of three rivers in Sunsari and Morang districts namely Kesahaliya (name changed to Budhi Khola upstream), Singhiya, and Lohandra rivers, the project under DWRI and supported by the technical cooperation of JICA aims to formulate a Flood Control Master Plan.

In line with the aim of the Master Plan preparation and perception on the cooperation, coordination and mutual existence of three level of government of Nepal, need of democratic decision making stated in the JICA Guideline for Environmental and Social Consideration 2010 and Stakeholder participation stated as one of the seven principles of JICA a workshop was held in Hotel Asiatique, Biratnagar on the 13th of March 2024 in the early stage of Master Plan preparation process. **"Workshop on Project Information Dissemination and Stakeholder Meeting for Flood Control Master Plan Preparation for Project for Capacity Development on Flood Control for Disaster Risk Reduction in Sunsari and Morang Districts, Nepal"** was organized by DWRI. The workshop has two distinct parts information dissemination and stakeholder meeting. Altogether 33 participants out sixty expected participants were present in the meeting.

The objectives of the workshop include Information Dissemination/Disclosure of Project at early stage of the project and receiving opinion/inputs or concerns from participants of this stakeholder meeting.

The methodology consisted of the Information dissemination through PowerPoint presentation and discussion among the participants. There were altogether six PowerPoint Presentations each one followed by discussion. A nice discussion after the end of all presentations, wrap up session and closing remarks took place in a sequence were able to summarize the whole day work.

Mr. Prem Lasiwa, SDE, DWRI took the responsibility of announcer and briefly informed about the workshop. He elaborated that chair person, technical person and head of social and environmental section from different 14 municipalities from flood affected zone were called for participation. He added that persons from the concerned ministries of this province, INGOs, NGOs and other academic people from the above mentioned municipalities were also invited in this workshop. He also informed about the representation from the central government in this workshop.

Opening Remarks and Introduction

Ashish Pokharel (DWRI Engineer) delivered the introduction of the project and informed on the participation of three different levels of government and some member of JICA project team in this workshop.

The project consists of thirteen membered JICA project team, led by Taksi TOYODA, who will carry out different types of survey works like hydrological, river basin, structural and non-structural structural measures, and environmental social consideration. The project will be coordinated and helped by Nepalese technicians.

He explained that the expected outcome of this one day workshop include that the participants will be clear on the outline for the project, project proponent, objectives of the project, implementing agency and collection of a wide range of views, inputs and concerns which will be helpful for planning from the participants of different sectors will also possible .

Project Information

Mr. Prem Lasiwa explained that the project is supported by the technical cooperation of JICA. Name of the project is “Project for Capacity Development on Flood Control for Disaster Risk Reduction in Sunsari and Morang Districts, Nepal”.

Two of the three rivers of this project fall under the jurisdiction of the local government while Lohandra falls under the jurisdiction of the central government. Therefore all three level of government are involved. This workshop is organized also to aware the local government and stakeholders regarding the upcoming survey works and also to get their help and support for the same.

He also explained the nature of the rivers under consideration and requirement of this project. He explained that the project is just the technical support provided by the JICA and after completing the project technical knowledge will be transferred to our Nepalese team. Implementing agency is DWRI and the project duration is of three years.

He explained that for the purpose of effective coordination to the project team a Joint Coordination and Monitoring Committee (JCMC) under the chairmanship of the Joint Secretary of MOEWRI is formed. Other members included in JCMC are representative from DWRI, province government and local government. From province government representatives included are from the ministry of infrastructure and energy while from the local government representative from Biratnagar metropolitan and Itahari sub metropolitan are included.

He explained that JCMC is an apex body which will make decisions and also conduct monitoring of the project. Despite of this the Director General of DWRI works as the Project Director and bears overall responsibility for project implementation, administration, monitoring and evaluation. The chief of the Water Induced Disaster Management Division, DDG of DWRI, is assigned as the Project Manager to look after the managerial matter of the project. Similarly, he mentioned that the counterpart assigned to work closely with JICA experts include SDE of DWRI, the chief of Koshi Bakraha River Management Project, Biratnagar and engineers from Biratnagar metropolitan and Itahari Sub- metropolitan. He informed that two engineers from DWRI are also assigned as counterpart to help in data collection and also learn data analysis. This will be the procedure to be applied for the transfer of technical knowledge.

The objectives of the project include preparation of flood hazard and risk maps and a flood control plan of three rivers. He mentioned that another objective is to establish a mechanism to plan, implement, and maintain flood control projects and the last objective he outlined is to strengthen the capacity of DWRI/MoEWRI to formulate flood control plans and to implement projects where the technical knowledge transfer takes place to Nepalese technical and non-technical persons.

He mentioned that the overall goal of the project is “Flood control plans and projects are developed and implemented by MoEWRI to contribute future flood risk reduction and integrated regional development” and the project propose is “The Capacity of MoEWRI is enhanced to formulate and implement flood control plans and projects to reduce flood disaster risks while considering the contribution to regional development in the target river basins”. He explained that the project will have three major outputs namely flood hazard and risk maps are prepared for the target river basins; flood control plans are developed for flood disaster risk reduction through structural and non-structural measures in the target

river basins; and an implementation mechanism is established to promote pre-Disaster Risk Reduction (DRR) investments in the implementations of flood control plans for flood disaster risk reduction.

He explained that the project is divided into two phases namely first phase of two years and second phase of one year. First two outputs will be achieved in phase one and last output will be achieved in the second phase.

He elaborated that land slide is the main concern of the residents at the upper reach of the river, while residents of Biratnagar are more concerned with the flood that they are suffering from and people in between are more concerned with sedimentation carried by these rivers.

He explained that in addition to the implementation agency MoEWRI, DWRI other central level agencies to be involved include Water Resources Division and Development Support and Provincial Coordination Division of MoEWRI, Flood Forecasting Division of Department of Hydrology and Metrology (DHM), Ministry of Physical Infrastructure and Transport (MoPIT), Ministry of Urban Development (MoUD), National Disaster Risk Reduction and Management Authority (NDRRMA). Similarly, at Koshi provincial level Ministry of Water Supply, Energy and Irrigation and Ministry of Road Infrastructure and Urban Development are involved. At local level infrastructure Division of concern local government are to be involved and at present Biratnagar and Itahari are involved.

Monitoring of goal, purpose and implementation mechanism will be carried out as per the baseline midterm and the end term. He also mentioned the use of monitoring sheet and verification including the interviews to the stakeholders.

The JICA team is privileged with three office rooms with all facilities provided by the DWRI. He explained that JICA team will do the baseline, interim and end survey and will be compared with the practice we had in the past and acquire the technical knowledge transfer.

Outline of the Survey

Mr. Naoki Yoshinaga of JICA team introduced briefly about the project including why JICA is about to conduct the project. He explained that river basin survey is a comprehensive assessment of the physical, hydrological, ecological, and socio-economic characteristics of a river basin. Further he explained on how to collect data including various aspects of the basin, including its topography, land use, water resources, biodiversity, and human activities.

Mr. Naoki Yoshinaga spoke about the objectives of a river basin survey and stressed that we have to understand the natural processes occurring within the basin, assess the current status of its resources, and identify opportunities and challenges for sustainable development and management.

He explained that collection of hydrological data is crucial for water resource management, flood forecasting and drought mitigation. Socio-economic surveys and interviews with local communities are conducted to understand the human activities, livelihoods, and socio-economic dynamics within the river basin. This information helps identify stakeholders, assess their needs and priorities, and integrate social considerations into basin management plans. Climate data, such as temperature, rainfall, and evapotranspiration, are collected to assess the influence of climate variability and change on the hydrology and ecology of the river basin.

Detail Explanation of the Survey

Mr. Sagar shahi presented on how the surveying work will be done in the projected area. The cross-section of the river will be taken in every 200m. Benchmarks will be established and Traverse will be done for the better accuracy. He also explained about the Traverse survey in detail on how the data are collected and drawing is done. He explained Traverse plays a vital role in surveying projects, providing a framework for mapping and establishing boundaries, as well as facilitating calculations of areas and volumes within specific regions by capturing geometric data, traverse surveying enables the creation of accurate representations and thorough analyses of surveyed areas.

He also mentioned about the different types of surveying instruments in gathering precise measurements and ensuring accuracy in various tasks which are Total Station, GNSS Receivers and Drone will be used for the overall survey works. Theodolites and level machines will also be used.

He also presented about the river training works which included bank protection, channelization, training walls/revetments. He also spoke about the river training structures such as weirs, barrages, and dams, are used to regulate the flow of water, control sediment transport, and manage water levels along rivers. He explained that all the existing structure will also be included in the topographical survey.

Explanation of Social Conditions and Possible Impact / Concern

Ms. Manju Sharma, senior Sociologist, DWRI presented the social condition of the project and possible impact/concern. She started her presentation by raising a question why sociological considerations in the project area are required. She explained that the social consideration is to be done as per the legal provision made by the Government of Nepal. JICA guideline indicate the requirement of social consideration and one of the seven principle JICA is to consider the social issues while formulating the project. Nepal is a signatory of the international laws for the environmental and social consideration. As per human right also social consideration is required. Community engagement in participation due to the requirement of ownership towards the project to increase accountability and responsibility and hence to achieve sustainability is essential. This is also required to understand people's needs concerns and to identify indigenous knowledge. She also mentioned that how many people are vulnerable in the project site and what potential social impact is likely to occur is a fundamental question to be answered by the project.

The details social condition of the project site will come out as per the progress of the project in future. The initial social condition of the project shows that there is no any cultural heritage site, small settlements of landless people along the river side are found, number of households in each of such settlement is yet to be collected and their displacement is also to be explained if required, agricultural land along all river side is found, local market and temple are also found. Landless people occupying the river bank are common issue and it will be addressed while implementing the project.

Regarding the scenario in yes and no project she explained that, flood will be control in yes project phase which at present is very troublesome. Economic activities will also increase in yes project situation and contribute to the urban development. She pointed out that there is a general principle in disaster risk management that rivers are to be saved from man and man are also to be saved from the river. These all issues are to be in corporate in our plan for common social acceptance. Such acceptance is addressed by recent River and Water Induced Disaster Management National Policy 2080. She explained that majority of the problem associated with our loss from river are found to be born due to human activities. We disturb the nature in our activities like settlement, clearing the forest area, extraction of sand, gravel and

soil and when such imbalance is beyond the tolerance nature directly penalize us. Landless people usually capture the bank of the river and when the flood hits them they expect help from the government. This is a repeating process going on for a long. When we disturb the right way of river it will definitely penalize us. Therefore, we have to carry out our economic and social activities beyond the right way of river. For this the planner and local stakeholder need to go together with cooperation and coordination for full mutual support.

She explained about the legal provision for social consideration and highlighted that the most important one is River and Water Induced Disaster Management National Policy 2080. She explained this policy is supportive to the concept of full mutual support of the planner and the stakeholders and it has also guided for the development of concerning acts and regulations as per this policy.

Explanation of Environmental Conditions and Possible Impact / Concern

Mr. Hari Shankar Jha, Environmental Inspector, Ministry of Tourism, Forest and Environment, Koshi Providence, presented on the environmental consideration and possible impact / concern of the project.

He stated that environment is a very common subject and then he shared his experience of last flood of 2075 in Biratnagar flooding in residential area and also in Biratnagar airport was vigorous.

He explained that waterlogging and flood have very fine line. If three rivers are taken in combination and looked as a mega watershed to reduce the flood and the associated hazard, we must take an integrated approach to solve the problem. He pointed out to the drainage system of Biratnagar and mentioned that beside the extent of rainfall release of water takes very slowly. He expected that the integrated project will at least invent that the problem is not of excess rainfall alone and will be able to point out other reasons of waterlogging.

He then discussed on the topic like why environmental intervention is required, what environmental intervention is essential, need of doing hydrological study, environmental risks and legal provisions made for the environmental study.

Discussion after the End of all Presentations

Mr. Bimal Narayan Chaudhary opened the discussion by asking how we will reflect the represents of Masan Ghat (the cremation places), temple and places for Chhath puja. Similarly, Mr. Yadav Prasad Dulal explained on the likely problem on the collection of data on landless people in the project area. Suggestion of taking Drone picture before collecting the name of landless came out but Mr. Dulal further suggested that it will be better to pre inform to the concern ward chairpersons and the concerned Rural Municipalities for close watching on the process of the collection of landless people's name as they clearly know the extent of landless people present in their surroundings.

Mr. Yadav Pokharel from Koshi and Bakraha River Management Project, Morang pointed out that what will happen to the existing structure and design and how will it be linked with the new design in the master plan. Mr. Prem Lasiwa clarified that there will be either strengthening or may need to change them to meet the design of the Master Plan.

Mr. Pushpa Narayan Chaudhary wanted to know how the survey will be done, will it be as per the existing course of the river or will be based on the map provided by the department of survey? Mr. Sagar clarified that we need to firstly considered the exiting course of the river to carry out the survey. In this regard Mr.

Hari Shankar Jha clarified that the river course could not be diverted to the previous course. Therefore, survey need to be done as per the present river course. Mr. Buddha Ratna Tuladhar suggested we may approach towards the outreach, we can do the dialogue, we should consider the peace requirement and also consider the political agenda and also evaluate as per the technical part. Mr. Krishna Prasad Rijal suggested that a separate study for the assessment of design of existing structure during the survey period to evaluate the possibility of their acceptance to meet the design approved in the Master Plan would be beneficial to judge on the already existing structures.

Wrap Up of the Workshop

Mr. Buddha Ratna Tuladar, SDE, DWRI wrap up the workshop. He mentioned that the information dissemination presentations by Prem Lasiwa and consultant team Manju Sharma and other took place successfully and all the existing information were disseminated properly. He mentioned that there was encouraging involvement of participants in discussion and valid comments and suggestions were brought in the floor.

Mr. Tuladhar Summarized that from the presentation of Mr. Lasiwa the information received were on project site, technical cooperation and active participation of JICA, JCMC, implementation direction, outcome of three year program, capacity building of beneficiaries through the delivery of different training program.

The project team explained why the report is required, justification of the use of the report, save Biratnagar from flood to save the loss of property and people from the flood, and the indicator of the project as related to flood Hazard and flood control activities. Mr. Tuladhar mentioned that regarding major structure flood control trap and flood control structure are proposed and suggestion on the use of the experience of Departmental Soil Conservation in this regard has come up.

Mr. Tuladhar expressed that Mr. Naoki from JICA team presented the procedure for data gathering and use of flood control map, topographic map etc. for the develop of the plan. He further added that Mr. Sagar Shahi from the side of consultant pointed out the utilization of longitudinal and cross-sectional survey.

Mr. Tuladhar explained that Ms. Manju Sharma presented the consideration of environmental and social concerns and she also explained the sector which are beneficial in compression to yes project and no project scenario. She also mentioned that people participation is the most essential factor for the success of the project. She also stressed on the symbiotic relationship of river and mankind where river protects the human life and human activities also can protect the river.

Mr. Tuladhar mentioned that in presentation of Mr. Hari Shankar Jha, the process of water logging in Biratnagar is governed by manmade interventions, natural disaster etc. along with the extent of precipitation. Mr. Jha also explained structural and nonstructural measures to control flood, mentioned the environmental risk as physical, social or cultural impacts. He clarified what type of environmental study is to be done? Whether it is EIA or IEE? He added we have to follow the environmental law and regulation for such studies.

Mr. Tuladhar mentioned that different issues raised for discussion also included the issue of landless people, addressing of the existing design in the master plan, replacement and duplication of projects. Mr.

Tuladhar at the end clarified that the activities will be carried out as per the schedule and output will be collected accordingly and next SHM will be organized based on the output till October 2025.

Closing Remarks

Mr. Krishna Prasad Rijal, SDE, MOEWRI delivered the closing remarks after playing a video. The video reflected the feeling of nature/flood explained to mankind in relation to undisturbed river and their beneficial relationship as a clean river and result of disturbance to the river system due to unfair activities of human beings.

The nature suggested that mankind needs to save the river as a result they will be saved themselves. He stated that the day long discussion of today included information on the project itself and role of the stakeholders to implement the project. He further mentioned that the organizer of this workshop, DWRI deserves special thanks. JICA team is appreciated for the initiation of special project that is being designed for flood control in Sunsari and Morang districts of Nepal.

Mr. Rijal further added that Nepal has approved River and Water Induced Disaster Management National Policy 2080 and mentioned that the project will be the pioneer to implement this national policy and it will create a guideline for the better implementation of this policy in future. He added that the project is going to reflect the concept of integrated water resources management. This will help to manage the river in a holistic approach addressing all concerns from its head to the tail. He strongly advocated our responsibility to save the rivers and necessity to be safe from the rivers is relevant requirement. He expressed his believes that this holistic approach will minimize the threats to rivers and threats to surrounding human beings too. He stated that we have to stick on what relation ecological, economic, cooperative, or competitive we want to build with these rivers.

Mr. Rijal further summarized that today we got information on the project itself, it's modality of implementation and its environment and social concern and he stressed that coordination is important to foresee the gaps as compared to the implementation to control the river in isolation. He expressed that the government perceptions on the cooperation, coordination and mutual existence of three level of government of Nepal will be reflected in this model integrated planning and integrated implementation of this project. He expressed his hope, if we are able to follow the guideline and achieve the outputs then the presence of JICA will be justify. Lastly, he thanked all participants for their active participation and announced the end of his closing remarks.

The workshop ended with the joint photo session of the participants and the Hi-tea.

Annex-1 schedule

Workshop on Project Information Dissemination and Stakeholder Meeting for Flood Control Master Plan Preparation

Date: 11/30/2080 (13 March 2024)

Venue: Hotel Asia Tique Biratnagar

Time	Duration	Session	Resource Agency/Person
10:00-10:30	30	Registration	—
10:30-10:40	10	Opening Remarks	Ashish Pokharel, Engg, DWRI
10:45-11:15	30	Introduction of participants	All participants
11:15-11:35	20	Project Information	Prem Lasiwa, SDE, DWRI
		Outline of the Survey	JICA Project Team/ Yoshinaga
11:35-12:00	25	Detailed explanation of the Survey	Sub-contractor
12:00-12:30	30	Discussion/questions	All participants
12:30-12:35	5	Wrap up the Workshop	DWRI
12:35-1:35	60	Lunch	
1:35-2:25	50	Explanation of Environmental and Social Conditions and Possible Impact/Concerns	Hari Shankar Jha, Environment Office, Province 1/ Manju Sharma, Sen. Sociologist, DWRI
2:25-2:55	30	Discussion	All participants
2:55-3:05	10	Wrap up the meeting	Buddha Ratna Tuladhar, DWRI
3:05-3:15	10	Closing Remarks	MoEWRI
3:15-4:00	45	Hi-tea	All participants

Annex-2 List of Participants

Government Of Nepal
 Ministry of Energy, Water Resources and Irrigation
 Department of Water Resources and Irrigation
 Water Induce Disaster Management Division
 Workshop on Project Information Dissemination and Stakeholder Meeting for Flood Control Master Plan
 Preparation
 13th March, 2024, Biratnagar

S.N.	Name Of participants	Designation	Office
1	Manju Sharma	Senior sociologist	DWRI
2	Krishna Prasad Rijal	SDE	MOEWRI
3	Laxmi Dhital	Gramthan mun	
4	Sushil Shrestha	SDE	IDO, Morang
5	Shyam Baniya	Infra. Expert	IDO, Morang
6	Ramesh K. Shrestha	SDE	MOPID, Biratnagar
7	Rabin Acharya	Engineer	Itahari, submetro
8	Pushpa N. Chaudhary	Environmental officer	Itahari, submetro
9	Yadav Pokhrel	Engineer	Koshi Baraha River Management
10	Chandra Chaudhary	Engineer	Koshi Baraha River Management
11	Roshan Kr. Shah	I.T.O	Jalada RM
12	Pashupati Yadav	Engineer	Jalada RM
13	Dipesh Aryal	Engineer	ABM Engineering Consultancy
14	Bibhusan Jung Poudel	Engineer	ABM Engineering Consultancy
15	Tika Ram Dhakal	Team Leader	ABM Engineering Consultancy
16	Hem Narayan Majhi	Engineer	Duhabhi Municipality
17	Bimal Narayan Chaudhary	Asst. Environment Officer	Duhabi Municipality
18	Ram Chandra Sah	Engineer	WRIDD Morang
19	Yadav prasad Dulal	Section Officer	MOSD Koshi province
20	Tirtha Kumari Kunal	Officer	NRCS Province
21	Dipendra Sharma	IT Officer	Barju Rural Mun
22	Birendra Giri	Engineer	Belbari Municipality
23	Deepak Saud	Surveyor	TMS
24	Prajesh Shrestha	Project Coordinate	TMS
25	Manami Eguchi	Environment, Social	JICA Project Team
26	Sagar Shahi	Sub-coordinate (TMS)	TMS
27	Dwarika Ghimire	Province Focal	IOM-UN MIGRATION
28	Saru Chaulagain	Assistance	Yachiyo Eng.
29	Naoki Yoshinaga	River basin surveyor	JICA Project Team
30	Hari Shanhar Jha	Env. Inspector	MOTFE
31	Buddha Ratna Tuladhar	SDE	DWRI, Jawalakhel
32	Prem Lasiwa	SDE	DWRI
33	Aashish Pokharel	Engineer	DWRI