

Travel Report

Participatory 3 Dimension Model (P3DM) for Dhungetar Village, Charghare VDC, Nuwakot District, Nepal

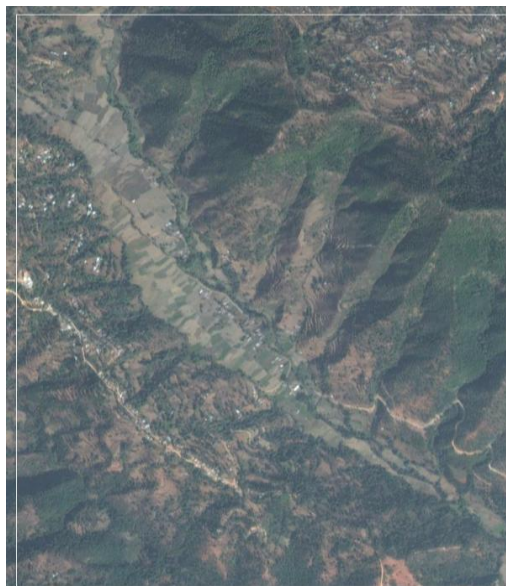
June 12 to 18, 2016

Govinda Joshi & Gauri S. Dangol

Background

The International Centre for Integrated Mountain Development (ICIMOD) has been promoting the Participatory 3 Dimensional Model (P3DM) as a tool to understand geographical dimension of mountain landscape, crucial for natural resources, watersheds management, village/town level planning, tourism, biodiversity conservation, reconstruction planning and for information exchange. The P3DM model was built in a Pilot Demonstration Project after the Post Earthquake Reconstruction and Rehabilitation in relation to the Resilient Mountain Village in Dhungetar, Charghare VDC, Nuwakot with the support of local community. It is an effort to engage communities in better planning and management of resources, particularly to help addressing reconstruction of houses after earthquake, water, land, and other resource management for livelihood security and climate change adaptation.

The Training/workshop on P3DM was held from June 12 to 18, 2016 at Dhungetar, Charghare VDC, Nuwakot. The programme was organized by ICIMOD IDRC Project through the Strategic Cooperation. The P3DM model was built with active engagement of local communities, with the overall technical guidance of Geospatial team of ICIMOD.



Model area

Training/workshop sessions

The training/workshop was started on June 12, 2016 with orientation class by Mr. Joshi to the participants about map reading, objective of P3DM, and process of building the model with past experiences of the Model.

The orientation session followed by theory classes on process of P3DM building and its importance as well as the types of materials and the mapping knowledge required for constructing P3DM.



In the process of making model the participants were divided into three main groups as following:

1. Tracing Group: for tracing the contour lines
2. Cutting Group: for cutting mats based on contour lines
3. Pasting and making model: based on cut trekking mats

The material used for the building model were trekking mat, dendrite, fevicol, white cement, primer, enamel color, different types of pins, and so on. The base map used was GIS map with contour interval of 10 meters derived from 5 meter ALOS DEM. The model built with number of cut mats as per contour. Then smoothen using white cement. After the structure was completed, different colors were used to represent different features (roads, rivers) and land use/cover (forest, grass, slopping terrace, level terrace) types. Main infrastructures like; individual houses, schools, temple found in the area were identified.



To give the model realistic look, forest were shown with green colored sawdust and the temple, school, individual houses, chautari (prominent tree,) etc were made and pasted in the surface of the model. Participants help to identify the exact location of the features in the model. Finally the landmarks, geographical features, location name of settlement, river, and spot height etc. placed in the model. In addition legend, scale and description of the model were labeled.



Participants

Different community participants were involved in this training/workshop with the different backgrounds ranging from carpenter, dakarmi (construction worker), farmer and others were 11.

ICIMOD - 2 (resource persons) and Intern 1.

All together 14 Participants were involved.

Model Specifications

Location: Dhungetar, Charghare VDC, Nuwakot

Size of the model: 4'-00" x 5'-00"

Ground distance: 1.829 km x 2.286 km

Area: 4.18 sqkm. (418.1 hectares)

Horizontal scale (x, y): 1:1,500

Vertical exaggeration (z): 1.5

Contour interval: 10 meter

Minimum height: 510 meter

Maximum height: 1060 meter

Height difference: 550 meter



About this Participatory 3D Model (P3DM)

This participatory 3 Dimensional Model was built at Dhungetar village, Charghare VDC, Nuwakot District built by the International Centre for Integrated Mountain Development (ICIMOD) funded by International Development Research Centre (IDRC). The purpose of this P3DM is to aid the villages in planning and understanding development works and environmental resources focusing for the earthquake reconstruction. It also helps visitors to understand the area.

The model building training started on 12 June 2016 and finished on 18 June 2016. The total number of participants in the training and construction were 14 including village representatives and model specialists from ICIMOD.

The model can be an effective tool for local stakeholders/development projects and government line agencies to design and implement development interventions. The model is equally useful for communities to priorities needs, design collaborative actions and make proposals for development aid.



PAC Team visit to see the P3DM

After the completion of model, the Programme Advisory Committee (PAC) Team along with ICIMOD Directorate and other Programme Managers and Theme Leaders have been visited to the Pilot Demonstration Project Area. Also interact the team with community about model and its use. The community members found very enthusiastic about the usefulness of P3DM for understanding area, planning for development, solving their problem and for communicating with the planners and policy makers as well as visitors to understand the area easily mainly to support the reconstruction and resettle.




The community participants were very positive, found model is very useful and they expressed their sincere thanks to the ICIMOD team for visiting and educating them for the P3DM construction process focusing on reconstruction.



LIST OF PARTICIPANTS

From Community			
	<p><u>Bijva B.K</u> (Dhungetaar, Nuwakot)</p>		<p><u>Chandra Bahadur Sunar</u> (Dhungetaar, Nuwakot)</p>
	<p><u>Lachu Sunar</u> (Dhungetaar, Nuwakot)</p>		<p><u>Manju B.K</u> (Dhungetaar, Nuwakot)</p>
	<p><u>Muna B.K</u> (Dhungetaar, Nuwakot)</p>		<p><u>Roshan B.K</u> (Dhungetaar, Nuwakot)</p>
	<p><u>Samikshya B.K</u> (Dhungetaar, Nuwakot)</p>		<p><u>Sarmila Sunar</u> (Dhungetaar, Nuwakot)</p>

	<p><u>Suresh B.Ka</u> (Dhungetaar, Nuwakot)</p>		<p><u>Susmita Sunar</u> (Dhungetaar, Nuwakot)</p>
	<p><u>Upendra Sunar</u> (Dhungetaar, Nuwakot)</p>		

From ICIMOD			
	<p><u>Govinda Joshi</u> (Training Coordinator for P3DM) Associate GIS Specialist ICIMOD</p>		<p><u>Gauri Shankar Dangol</u> (Research Associate Digital Cartography ICIMOD)</p>
	<p><u>Ram Kumar Tamang</u> (Intern)</p>		