

Self-Reliant, Equitable and Inclusive Society

Source Book
for
VDC Level Periodic Sustainable Development
Plan Formulation



Namsaling Community Development Centre (NCDC)
Self Reliant, Equitable and Inclusive Society

Table of Contents

Part One	1
A. Periodic Sustainable Development Plan Formulation Process of Village Development Committee (VDC).....	1
1. What is periodic plan?	1
2. Basis to prepare Periodic plan.....	1
3. Pre-preparation for plan formulation	2
4. Stages of plan formulation	2
Part Two.....	13
A. Participative method of data collection and forms’ model	13
1. Background.....	13
2. Main function, methods and results of participative data collection	13
3. Forms used during data collection for periodic planning	18
B. Forms related to plan formulation.....	19
1. Weightage system for plan prioritization.....	19
2. Tick-mark system for plan prioritization	19
3. Priority ranking method for plan prioritization.....	19
4. Ward level plan formulation form	20
C. Description about computer software called ‘NCDC Profiling System’ prepared by NCDC, Ilam for the management and processing of data and information collected for the periodic plan.....	21
1. What is ‘NCDC Profiling System’ computer software?.....	21
2. Data management/adjustment method in NCDC Profiling System.....	21
3. Usage and benefits of NCDC Profiling System.....	21
4. Interface of NCDC Profiling System	22
D. Information about Geographical Information System (GIS)	23
1. Introduction.....	23
2. Geographic information included in VDC level plan	24
3. Use of GIS in VDC plan	24
4. Methods for the preparation of Geographic Information of VDC	25
5. Maps prepared from GIS	26
E. Methods for climate change analysis	28

Time line	28
Disaster and catastrophe prioritization.....	28
Disaster and catastrophe mapping	29
Seasonal calendar analysis	29
Crop calendar analysis	30
Risk Analysis	31
Annexes	33
Annex 1: Integrated plan formulation committee.....	33
Annex 2: Monthly time table for yearly plan formulation process.....	34
Annex 3: Model framework for periodic sustainable development plan.....	35

Part One

A. Periodic Sustainable Development Plan Formulation Process of Village Development Committee (VDC)

1. What is periodic plan?

The plan made for more than one year time period is called the periodic plan. In the context of Nepal, in accordance with national plan, periodic plan for usually five or three years is made. However, for the preparation of the VDC Periodic Plan, following contents need to be included.

- a) **Social development:** Community, population, nature of habitation, education, health, drinking water, sanitation, gender and inclusive development etc.
- b) **Physical and infrastructure construction:** Land-use and works related to construction
- c) **Economic development:** Sources of income, industries, trade, agriculture, forest production and situation of use of natural resources, employment opportunity, areas of expense, etc.
- d) **Environmental development:** Biodiversity, forest, plants, animals, water resources, etc. and subject interrelated with a, b and c explained above.
- e) **Human resources development:** Professional and technical skill, monetary and non-monetary incentives, capacity development, entrepreneurship, use of information technology, etc.
- f) **Institutional development:** Administration structure of VDC and stakeholders along with structural arrangements for plan implementation like resources mobilization, implement process, model, etc.

2. Basis to prepare Periodic plan

Ministry of Federal Affairs and Local Development (MoFALD) has issued 'VDC's plan formulation, implementation and evaluation directive 2067'. Based on the below listed act, regulation, policy, directive and methodology, this booklet has been prepared to facilitate the implementation of the same in the local level. While formulating periodic plan, contents mentioned in section 1 (as explained in section 4) are discussed and prioritized starting from bottom (Community, Tole, and Village), all the way through ward and finally to the VDC level. Finally, the periodic plan is ready after the VDC, through its council meeting, prepare an aggregate policies (clearly stating the priority) relating to its annual income sources and expenditure.

Policy basis to prepare periodic plan

- Local self-governance act 2055 (1999)
- Local self-governance regulation 2056 (2000)
- Local body (financial administration) regulation 2064
- District development plan formulation directive 2058

- Minimum condition measure guideline 2067
- Financial administration guideline 2062
- Participative data collection and information directive 2054
- VDCs plan formulation, implementation and evaluation directive 2067
- VDCs grant regulation directive 2067
- Previous policies and by-laws of related VDCs

3. Pre-preparation for plan formulation

- From the stakeholders' assembly, organized from the initiation of VDC secretary/head, a common idea of development has to be prepared.
- Differentiate the topics to be dealt in an egalitarian way or with positive discrimination.
- A list of organization/committee/association, etc. which could be partner of VDC in its development should be prepared.
- Confirm and prioritize the class, cast, professional group that are to be actively mobilized.
- Identify the sources of income (tax, revenue, service fee, income from sale of natural resources etc.) and discuss it starting from local and village/tole level.
- Training should be given to fill various types of forms that are used to prepare the plan.

4. Stages of plan formulation

In the year of periodic plan formulation, mentioning fiscal year, following two plans are made together:

- a. Periodic plan for five year or more or less than that period
- b. Annual plan for coming fiscal year.

While preparing annual plan for coming fiscal year, assets and liabilities from the past, incomplete plans and to-be-implemented plans should be taken into consideration. In addition, the new plans should also be selected in accordance to periodic plan.

In fact, before preparing VDC plan, a district level meeting of the stakeholders must be organized in coordination of District Development Committee (DDC). Such meeting should have discussed and analyzed about, the basis of income source so as to help VDCs across the district, plans, technical support, basis of monitoring and evaluation, etc. Different works to be done during the various stages of the planning process are described briefly in the table.

Stage	Works	Time
Initial stage	<p>1. Coordination meeting with stakeholder in district</p> <p>a. Organizer: DDC</p> <p>b. Participant: Line agencies, local and international Non-Governmental Organizations (NGOs), representatives of donor agencies, organisation of commerce and industries, representative of organisation related to inclusive policy, social worker, intellectual and representative from professional organizations.</p> <p>c. Activities: Possible sources and estimation for VDC's periodic plan, grant from center and other support, partnership plan with municipality and other neighboring VDCs, institutional capacity development, technical support, role of supporting agencies, basis for monitoring and evaluation along with strategic plan so as to develop a plan as per the district and national policy.</p>	First week of Mangshir
	<p>2. VDC level all party coordination meeting</p> <p>a. Organizer: VDC</p> <p>b. Participants: VDC members, representatives from active political parties in VDC, representatives of civil society in the wards, representatives of line agencies in the VDC, representative of organisation related to inclusive policy, teacher, social worker and intellectuals etc.</p> <p><i>Note: If there is any plan/programme to be conducted jointly with neighboring VDCs/Municipalities, representatives from those VDCs/Municipalities should be invited.</i></p> <p>c. Activities: Analysis of the list of possible resources identified in the district level, analysis of internal sources and organizational capacity of the VDC, analysis of data collection and processing strategy, selection of partner organizations for preparation of periodic plan and preparing a policy to harmonize the VDC plan with that of district plan. Discuss about the plan that has to be prepared in coordination with neighboring</p>	Second week of Mangshir

	Municipalities or VDCs. Fix the date and place for VDC level assembly regarding periodic plan preparation.	
	<p>3. VDC assembly:</p> <p>a. Organizer: VDC (committee should run orientation programme with the help of NGO or experts)</p> <p>b. Participant: VDC members, representatives from political parties, former members, representatives of civil society in the wards, representatives of child club, teacher, female, intellectuals, business persons, Dalit, indigenous people, minority people, local organization, social worker, representatives of civil society and other inevitable person for VDC.</p> <p>Activities:</p> <p>1. Publish all-party meeting decision, explain the importance of preparing periodic plan, inform about the stages and processes to be adopted for preparing periodic plan, clarify about the situation of participation and financial as well as technical support, inform local people about multi-sector data collection methodology to be adopted for the plan along with the importance of such data. Finally, explain local inhabitants about the data processing ways and the help expected from them during the plan formulation.</p> <p>2. For the preparation of periodic plan in a responsible way, plan formation facilitation committee is formed adopting inclusive policy that ensures 33% participation of women. Select a coordinator, secretary and members as per requirement. Identify a strategy to manage opportunity and threats that will probably occur during the period of plan formulation. Organize one day orientation programme to inform the selected committee and other partner organization about the periodic plan formulation method, process, necessity and importance.</p> <p><i>Note: Participants for the activities number 2 & 3 are almost same. So, the orientation programme can be organized the next day,</i></p>	Third week of Mangshir

	<i>after the VDC assembly and committee formation.</i>	
Situation analysis and evaluation stage (Do as per described here for the first time. From the second time, updating data would be enough)	1. Ward level data collector (volunteer) selection: a. Organizer: VDC b. Participants: Periodic plan formation facilitation committee, VDC's secretary c. Activities: To collect the data for the situation analysis of VDC and for household survey, 18 enumerators (2 from each ward, containing at least one female) are selected. The selected enumerators should at least have higher secondary level of education and must be capable to ask questions and answer. On top of that he/she must have basic knowledge in mathematics. <i>Note: Wards of VDC are not of similar size so the responsibility should be given to enumerator as per the ward size.</i>	Next day of orientation programme
	2. Orientation and training for enumerator a. Organizer: VDC, plan formulation facilitation committee (for this, support should be taken from NGOs and other experts). b. Participants: Enumerators who are selected from ward level by plan formulation facilitation committee. c. Activities: Conduct a 3-5 days training (including practical exercises) so as to inform enumerators about planned development process and the methodology to collect social, economic, biological, physical, etc. data necessary for the VDC's periodic plan preparation. Additionally, along with necessary forms required for the data collection, the enumerators should also be given skills to use the participative techniques as listed in part 2 of the booklet.	Within a week of selection
	3. Data collection a. Monitoring data collection: Members of plan formulation facilitation committee and experts. b. Participants: Selected enumerators from	Last week of Mangshir

	<p>ward level and household heads</p> <p>c. Activities: Trained enumerators should do the household survey based on the form provided. For other required information, key informant interview and focus group discussions should be conducted. Some information has to be collected from secondary sources. Biological, physical and geographical information should be collected by subject specialist based on field visit.</p>	
	<p>4. Ward level data arrangement</p> <p>a. Arranger: VDC, plan formulation facilitation committee, experts</p> <p>b. Participants: Selected enumerator from ward level, representatives of supporting organizations</p> <p>c. Activities: After collection of data from ward level, enumerators from the respective wards should pre-arrange the collected data. The arranged data should be presented in table.</p>	First week of Paush
	<p>5. VDC level data arrangement</p> <p>a. Facilitator: VDC, supporting organization and experts</p> <p>b. Participants: Enumerators, data entry technician</p> <p>c. Activities: Available data are serially entered in the software called NCDC profiling system¹. Related subject experts should arrange and analyze information associated to biological, physical and geographical.</p>	First week of Paush
Plan formulation stage	<p>1. Presentation of data at wards level and need identification at tole level.</p> <p>a. Organizer: Plan formulation facilitation committee, VDC</p> <p>b. Participants: Plan formulation facilitation committee, former and present wards officials, ward level civil society members, representatives of local organizations, representatives of active political parties in the wards, stakeholders and local ward</p>	First week of Paush

¹ Information about NCDC Profiling System software which is used to enter the socio-economic and other related data collected from VDC has been given in section 3 of part 2 inside this booklet.

	<p>residents. (It is plausible to include representative from neighboring wards. Or, based on situation and applicability, data presentation of 2-3 wards can be merged and done in one single location.</p> <p>c. Activities:</p> <ol style="list-style-type: none"> 1. Organize one day workshop in order to present, discuss and review the arranged data at ward level. On the basis of collected data, identify and select tole level needs. 2. On the basis of data from every ward and methodology explained in section A inside part 2 of this booklet, identify ward level problems, analyze and prioritize it. As indicated by data and from problems identified sector wise, prepare a ward level plan draft according to proposed format. During this stage, special consideration should be given to ensure participation of all section of societies, in particular the minorities. In addition to this, law and policy related to plan/project selection should also be taken into consideration. <p><i>Tools and the related forms to prioritize local level projects have been explained in section B inside part 2 of this source book.</i></p>	
	<p>2. VDC level plan formulation workshop</p> <p>a. Organizer: VDC</p> <p>b. Participants: Officials of VDC, representatives of political parties, former members, ward level civil society members, integrated plan formation committee, plan formation facilitation committee, representatives of child club, teacher, woman, intellectual, Dalit, indigenous people, minority and other inevitable person. (If necessary, representatives from neighboring VDC/ municipalities also can be invited)</p> <p>c. Activities:</p> <ol style="list-style-type: none"> 1. After the availability of the processed data, on the basis of number of participants, a VDC level periodic plan formulation workshop ranging from 1-3 days should be organized. The VDC data is presented in the workshop. Then, as per the analysis based on the data 	<p>Third week of Paush</p>

	<p>collected, VDC level problems are identified and selected. In this plan formulation workshop, VDC level plans and integrated models of such plans are selected and prioritized. Similarly, from this workshop, long term concept, goals, objectives and strategies are formulated for the planned development of the VDC. Likewise, strength, weakness, opportunities and threat (SWOT) analysis, comparative study of development in the past and present, identification of sources, selection of indicator, plan prioritization, plan implementation and monitoring & evaluation mechanism required for overall development of VDC is done from this workshop.</p> <p>2. A discussion and interaction programme with neighboring municipalities/VDCs and stakeholders should be conducted. Plans to be implemented in coordination with other VDCs should be selected in the plan and responsibilities between the VDCs should be managed accordingly. In all of the above discussions, commitment towards selection and prioritization of previous incomplete plan should be sought.</p>	
	<p>3. Plan analysis and draft preparation</p> <p>a. Preparation of draft: Experts under the leadership of VDC (If possible, it would be better to involve chairperson of plan formulation facilitation committee or other members).</p> <p>b. Participants: Human resources involved in plan analysis (as per requirement)</p> <p>c. Activities:</p> <p>1. Draft plan is prepared following the above mentioned stages. Mentioning the policies relating to periodic plan, giving the situational analysis as shown by the data collected and listing the problems and plans identified during the participative discussion in different stages, a draft plan is prepared.</p> <p>2. Suggestions and comments from line agencies at district level over the draft plan</p>	

	<p>prepared should also be taken. The draft should be prepared according to sample format of periodic sustainable development plan attached within this booklet in section A of part 3.</p>	
	<p>4. Discussion on draft a. Organizer: VDC b. Participants: District Development Committee (DDC) and representatives of line agencies, VDC level plan formulation facilitation committee, political parties, active organizations, association of industry and commerce and other stakeholder related to plan formulation. c. Activities: 1. After preparation of draft periodic plan, it should be distributed to above mentioned stakeholders for their comments on the draft. After the stakeholders finish reading the draft and have their comments ready, a VDC level and a DDC level meeting should be organized to discuss the draft plan. Constructive comments and suggestions received from stakeholders should also be incorporated in the plan. While publishing the plan document, commitment statement for proper implementation of plan should also be included from DDC, VDC, political parties, NGOs and other stakeholder who are actively working at VDC.</p>	
	<p>5. Approval by VDC council and publicisation a. Organizer: VDC b. Participants: Members of Village council, district level line agencies and representatives of DDC c. Activities: Discuss over draft of periodic or annual plan or both and approve it from VDC council. The plan book should be publicized through VDC as an official VDC document.</p>	<p>End of Poush</p>
	<p>6. Plan publication and distribution a. Publication and distribution: VDC b. Essential receivers: VDC information</p>	

	<p>centre, DDC information centre, stakeholders if there is any partnership or joint programme, media.</p> <p>c. Activities: The plan legitimized through the council should be published in the form of book as per necessary. The book should be disseminated to national planning commission, related ministries, DDC, line agencies and related stakeholders.</p>	
Plan Implementation stage	<p>1. Orientation to stakeholders for plan implementation</p> <p>a. Organizer: VDC</p> <p>b. Participants: DDC, representatives of the VDC, representatives of the political parties' active in the area, district level line agencies, NGOs, officials from neighboring VDCs.</p> <p>c. Activities: For the successful implementation of plans included in VDC plan, the plan book should be distributed to all stakeholders and one day plan implementation orientation programme should be organized.</p>	
	<p>2. Proposal writing training for local stakeholders on the basis of periodic sustainable development plan</p> <p>a. Organizer: VDC</p> <p>b. Participants: Local NGOs, cooperative and group representatives</p> <p>c. Activities: In order to facilitate the implementation of the selected plans, it is necessary to attract investment. Training should be conducted to help participants in writing project proposal and in searching possible source.</p>	
	<p>3. Annual plan formulation, VDC's budget appropriation and implementation according to plan</p> <p>a. Organizer: VDC</p> <p>b. Participants: VDC officials, ward level civil society, integrated plan formulation committee, members of village council</p> <p>c. Activities: Preparation of annual plan on the basis of periodic plan and budget allocation.</p>	

	<p>4. Exploring the sources for implementation of periodic plan and management</p> <p>a. Facilitator: VDC</p> <p>b. Participants: Local NGOs, cooperatives and user groups.</p> <p>c. Activities: After the proposal writing training, project proposals, for the plans listed in the periodic sustainable development plan, are prepared and submitted to line agencies and other related bodies. Advocate for plan implementation.</p>	
Monitoring and evaluation stage	<p>1. Plan monitoring committee formation and mobilization</p> <p>a. Organizer: VDC</p> <p>b. Participants: VDC officials, ward level civil society, representative of political parties and other stakeholders.</p> <p>c. Activities: VDC level periodic plan monitoring committee should be formed for the successful implementation and sustainability of projects. VDC should mobilize the monitoring committee as per requirements.</p>	
	<p>2. Annual review of plan</p> <p>a. Organizer: VDC</p> <p>b. Participants: VDC officials, representatives of political parties, ward civil society</p> <p>c. Activities: Annual review of the plan has to be done at the end of the year or coming village council meeting and necessary suggestions have to be incorporated.</p>	
	<p>3. Public hearing:</p> <p>a. Organizer: VDC</p> <p>b. Participants: VDC officials, representatives of political parties, former members, ward civil society members, representatives of child club, teacher, woman, intellectual, industrialist, business person, Dalit, indigenous people, minority, local organizations, social worker, representatives</p>	

	<p>of civil society and others persons deemed necessary by the VDC</p> <p>c. Activities: User group or implementing agency which run a project with more than Rs 50,000 VDC grant has to do public audit of the project. One day public hearing must be conducted for project run in the current fiscal year to discuss about its source of income, expenses, partnership, maintenance, operation responsibility etc must present in programme. Public hearing must also be conducted for inter-program coordination mentioned in periodic plan.</p>	
	<p>4. Updating the plan</p> <p>a. Organizer: VDC</p> <p>b. Participants: VDC members, representatives of political parties, former members, ward civil society members, representatives of child club, teachers, woman, intellectual, Dalit, indigenous people, minority, local organizations, representatives of civil society and other stakeholders in the VDC.</p> <p>c. Activities: After completion of five years separated for the periodic plan implementation, based on the feedback received, VDC should update the plan.</p> <p><i>Note: This is done in the last year of periodic plan and it is a basis for next periodic plan.</i></p>	

Part Two

A. Participative method of data collection and forms' model

1. Background

Socio-economic, biological, physical and environmental data are necessary components while doing objective analysis and preparing periodic sustainable development plan of a VDC. Only on the basis of such data, development and other entire works can be planned, executed, managed and monitored with ease and consistency. Different methods and forms have been prepared to collect information based on participatory model.

After the collection of necessary data for the VDC, the information and data collected is entered in computer software which has been specially prepared for the purpose. Since the data entered in the software can be updated as per need, it is easy and economically viable for all the VDC to use the software. Moreover, data retrieval at the time of necessity is easier, if computer software is used.

In the following part, process to prepare profile and periodic plan of a VDC has been discussed. Participatory methods and different forms (with their explanations) necessary for the collection of data and information, in order to prepare profile and periodic sustainable development plan have been explained with examples in the subsequent part. Following this booklet, it is expected, VDCs and the local organizations will be able to prepare its situational analysis and periodic plan with ease.

2. Main function, methods and results of participative data collection

S. N.	Activities	Methodology	Result
1	In order to clearly picturize the social and natural facts in a society, Participative Rapid Appraisal (PRA) method should be used.	<ul style="list-style-type: none">• People from all societies should be called for meeting in their respective places.• By drawing in a big chart paper or in the courtyard (using local materials as index), a picture exactly depicting social and natural situation of society should be drawn or produced.	Social and source map
2	The situation of access to service for all the classes of people in the society should be identified through map.	<ul style="list-style-type: none">• Meeting of informants from respective tole or community should be conducted.• From the participants, types of services and their whereabouts should be	Service access map

		<p>asked and the reasons behind should be searched.</p> <ul style="list-style-type: none"> • Places visited most often for services should be signified by big sized papers while small papers should be used to mark places which receive lesser visits for services. • Participation from all the communities must be ensured. Participation of backward communities, however small it might be, should be mentioned. 	
3	Needs of people in communities should be comparatively selected and prioritized. Different wants and needs between members of a society should be prioritized based on different methods of prioritization explained in section B of part 2.	<ul style="list-style-type: none"> • Participants from community/tole should be gathered in one place. • Taking one out of several methods of prioritization, the plans selected for the periodic plan should be prioritized. 	Need standardization (prioritization)
4	Profession, source of income, condition of poverty, etc. of the peoples living in community should be identified and categorized as category A, category B, category C and category D.	<ul style="list-style-type: none"> • Peoples from a tole/community should be gathered in a place and name of each household head should be written in a separate piece of paper. • By using participative analysis technique, households (represented by name of household head) of similar economic status should be placed in a same category. In the process, categories signifying different economic status are created. • In this way, conclusion regarding economic condition of all the households should be drawn. 	Economic standardization

5	Relations and consequences between all the different activities carried out in the community should be analyzed. Time needed to complete work, possible problems that might have to be faced and responsible persons/bodies for different activities should be clearly shown in a flow chart.	<ul style="list-style-type: none"> • Meeting of informants from the community should be called. • A list of subjects or areas for which the information is required should be agreed upon. • Information, time required, responsible authority and the effects should be sequentially prepared. 	Flow chart
6	History of society or a list of events chronologically arranged, their effects and the results should be analyzed.	<ul style="list-style-type: none"> • Key informants to be called for should be matured and well informed persons. • List of remarkable events and their effects in the society with respect to year of occurrence should be prepared. • Examining the information collected, a conclusion should be reached. 	Chronological picture
7	Information about the social, economic, environmental and cultural changes that have occurred in the community at certain period should be obtained.	<ul style="list-style-type: none"> • Meeting of informants from the community should be called. • Information about the social, economic, environmental and cultural events occurred at certain period should be obtained along their year of occurrence. • Discussing the event in a flow, a conclusion should be reached. 	Time flow chart
8	Diagrammatic representation of main problems in the society, their root causes and consequences should be presented in the form of problem tree.	<ul style="list-style-type: none"> • Participants from community/role should be gathered in one place. • For discussion and analysis of each problem, diagram of a tree should be made mentioning the causes of the problem as roots and consequences as branches of the tree. • Real cause of the problem 	Problem tree

		should be identified and conclusion should be made.	
9	Leaders and power centers of the community should be identified; their access, influence and community's perception towards them should be analyzed. In addition, information about real and formal leaders should also be gathered.	<ul style="list-style-type: none"> • Community/role meeting should be organized for information gathering. • Based on discussion - access, relation and influence of the identified stakeholders in the community should be indicated by big and small paper. • To indicate stakeholders with limited relation, access and influence over the community, small papers are used and placed far away from the center. Similarly, for stakeholders with strong hold in the community big papers are used and are kept close to center. • In the discussion, reasons behind the matrix should be discussed along with the collected of other related information. 	Interest group matrix or stakeholders analysis
10	For the theme centered discussion, different styles and techniques should be employed during discussion or information collection so as to reach conclusions regarding the topic.	<ul style="list-style-type: none"> • In order to collect information in different topics during the community or ward meeting, a list of relevant questions should be selected. • The selected questions should be serially kept in the meeting and the answers should be sought. • The facilitator should create a favorable environment for the participants to express their views rather than him speaking most of the time. 	Semi-structured questionnaire

		<ul style="list-style-type: none"> • The facilitator should strive to keep the discussion oriented within the main theme so as to get the required data or information. • For the lively discussion, the facilitator must be able to ask open ended and relevant question in a sequentially order. • Finally, towards the end of discussion, conclusion should be reached. 	
11	Discussion with individuals, groups and associations interested in different related subject should be held and conclusions should be drawn.	<ul style="list-style-type: none"> • Meeting of individuals, in the tole/community, related to various subjects/regions should be organized. • As per the subjects, wide discussion should be conducted in the topics selected. • All of the participants should be given a chance to participate in the discussion. • From the points received in the discussion, a conclusion has to be reached. 	Target group discussion
12	Information about different activities done by community people along with the time and the relation between them should be collected in advance.	<ul style="list-style-type: none"> • Informants should be selected. • After discussing about the objectives of the meeting, a draft calendar consisting of days and months should be prepared, either on paper or on ground. • According to subjects, a list of different activities done as per different months should be prepared. • Finally, based on the information received, a calendar should be finalized. 	Seasonal calendar

3. Forms² used during data collection for periodic planning

There are 22 sample forms used during data collection for sustainable development plan formulation. Among them, form number 1, 2, 3 are filled up visiting each and every household. Data and information to fill other forms can be gathered from tole/community meeting and focus group discussions (FDGs) as per requirement. Some forms can be filled in different organization, line agencies, schools etc. conducting meeting or discussion. In addition to data collection forms, there are other forms related to project planning and prioritization also. Data and information needed for the planning and prioritization should also be gathered from community meetings and discussions.

² Details about the forms and its usage can be found in the Nepali version of the booklet.

B. Forms related to plan formulation

1. Weightage system for plan prioritization

This is a simple method used for the prioritization of local level plans. For this, plans selected from community level are placed in a single column along with indicators (also in column towards the right) which are given different weightage based on the importance. For example, employment, peoples’ participation, benefits to marginalized people are some of the indicators used for the prioritization which are given 10 points each if the plan is positive towards the indicator if not they receive 5 points each.

After deciding over the weightage of different indicators with respect to all the plans selected, the sum of all the indicators is calculated. Finally, the plan with highest sum value is prioritized first and the same process is continued to finalize second, third, fourth priority project.

2. Tick-mark system for plan prioritization

Plans or programs selected at the local level are listed in a column along with the indicators (also in column towards the right) used for prioritization. Each indicator is then evaluated against every plan or program, ticking right if the plan/program fulfills the indicator and crossing wrong if the indicator is not achieved. For instance, an infrastructure development might be positive towards indicators like ‘employment generation’, ‘instant benefit’, ‘peoples’ participation’, etc. but might not satisfy the ‘sustainable, gender inclusive and environmental friendly’ indicator. In this case, the plan point is counted three in list of four indicators.

After evaluating all plans/programs against the list of selected indicators, number of tick-marks received by each of the plan/program are counted and the plan/program that has received highest number of tick mark is given the first priority and the same process is continued to finalize second, third, fourth priority project.

3. Priority ranking method for plan prioritization

After selecting the local plans, this method is used for plan prioritization. For the purpose, all of the selected plans are listed in a column and the same plans are kept in row also. This creates a square matrix. Then, a plan in the column is compared against the other plan in the row and the plan which is more important is written in their common box. After repeating the process for all of the plans, the plan which is selected highest number of time is prioritized as first and rule of descending order is applied to select second, third, fourth priority project.

PLANS	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5
Plan 1	X	Plan 1	Plan 1	Plan 4	Plan1
Plan 2	X	X	Plan 2	Plan 4	Plan 5
Plan 3	X	X	X	Plan 3	Plan 3
Plan 4	X	X	X	X	Plan 5
Plan 5	X	X	X	X	X
Total	3	1	2	2	2

Priority	I	III	II	II	II
-----------------	----------	------------	-----------	-----------	-----------

4. Ward level plan formulation form

S. N	Project name	Type of project	Resouce management body and projected cost (In numbers)						Timetable		Beneficiary population from gender perspective		Beneficiary population from the perspective of caste and ethnicity			Responsible body for project implementation
			Local body	Consumer committee	Private sector	NGO	Others	Total	Starting Time (Fiscal Year)	Ending Time (Fiscal Year)	Male	Female	Indigenou s/Ethnicities	Dalit	Others	
1	Devithan Drinking water Project	Infrastructure development	15,000	12,000	0	4,000	0	31,000	Fiscal Year 069/70	Fiscal Year 069/70	66	32	50	28	50	Consumer committee

C. Description about computer software called ‘NCDC Profiling System’ prepared by NCDC, Ilam for the management and processing of data and information collected for the periodic plan

1. What is ‘NCDC Profiling System’ computer software?

It is mandatory for a VDC to prepare a village profile reflecting all of its components inside its boundary. Based on the village profile prepared and the information revealed by different indicators used in preparing a profile, a VDC is expected to prepare its periodic plan. Moreover, it is well known that NCDC, since 15 years, has been helping VDCs in preparing their village profile as well as their periodic sustainable development plan. Based on the policy provisions of Nepal Government and 15 years of field experience of NCDC, this VDC level plan formulation booklet has been prepared.

In this context, to manage the data and information required for the preparation of village profile, NCDC has developed and been using a standard computer software called NCDC Profiling System. The software is easy to use and is very helpful in preparing village profile, periodic plan as well as in retrieving and updating information at any time.

2. Data management/adjustment method in NCDC Profiling System

This standard computer software can be bought in resource center of NCDC located in Ilam at reasonable price. The data, once entered in the software, can be used whenever needed. Detailed information about each household and individuals residing in the household can be retrieved from the software. The data once entered in the software can be obtained in different types of tables and figures. From the software, any VDC can use and update its data which in-turn will ensure effective service delivery from the VDC contributing in promotion of good governance as well.

3. Usage and benefits of NCDC Profiling System

The data collector should enter the data and information collected from household and ward level in NCDC Profiling System. For the data entry from multiple users at a single time, client server network base system can be used. Using MS SQL database, required report can be retrieved in Microsoft Excel Sheet, in no time. While the report obtained from this process is published as village profile, periodic plan is prepared with the help of the indicators as given by the data. By preparing Single User of the data, each VDC can retrieve necessary data and information as required. With the use of this software, VDCs should keep on updating different sector-wise information inside its boundaries. This software is expected to manage data and information related to VDC in an easy way. Likewise, it will also be helpful in preparing district profile.

4. Interface of NCDC Profiling System

Smart VDC Profiling System(NCDC)

गा.वि.स वस्ती पारिवारिक विवरण रिपोर्ट प्रशासनिक कार्यहरू पासवर्ड परिवर्तन हाम्रो बारेमा

गा.वि.सको नाम: जितपुर

चिनारी

चिनारी	संघसंस्था	भौतिक पूर्वाधार	खानेपानी	सिंचाई	विकास निर्माण	वन सम्पदा	वन्यजन्तु	प्राकृतिक प्रकोप	आय विवरण	विद्यालय	औद्योगिक
संघ संस्था											
भौतिक पूर्वाधार											
खानेपानी											
सिंचाई											
विकास निर्माण											
वन सम्पदा											
वन्यजन्तु											
प्राकृतिक प्रकोप											
आय विवरण											
विद्यालय											
औद्योगिक विवरण											
राजनैतिक दल											
महत्त्वपूर्ण स्थान											
निकासीजन्य प्लोत											
जलस्रोत											
बजार											
चाडपर्व											

अक्षांश डिग्री मिनेट सेकेण्ड

देशान्तर डिग्री मिनेट सेकेण्ड

उचाई - समुद्र सतहबाट मि. देखि मि. सम्म

क्षेत्रफल वर्ग कि.मि.

जलवायु

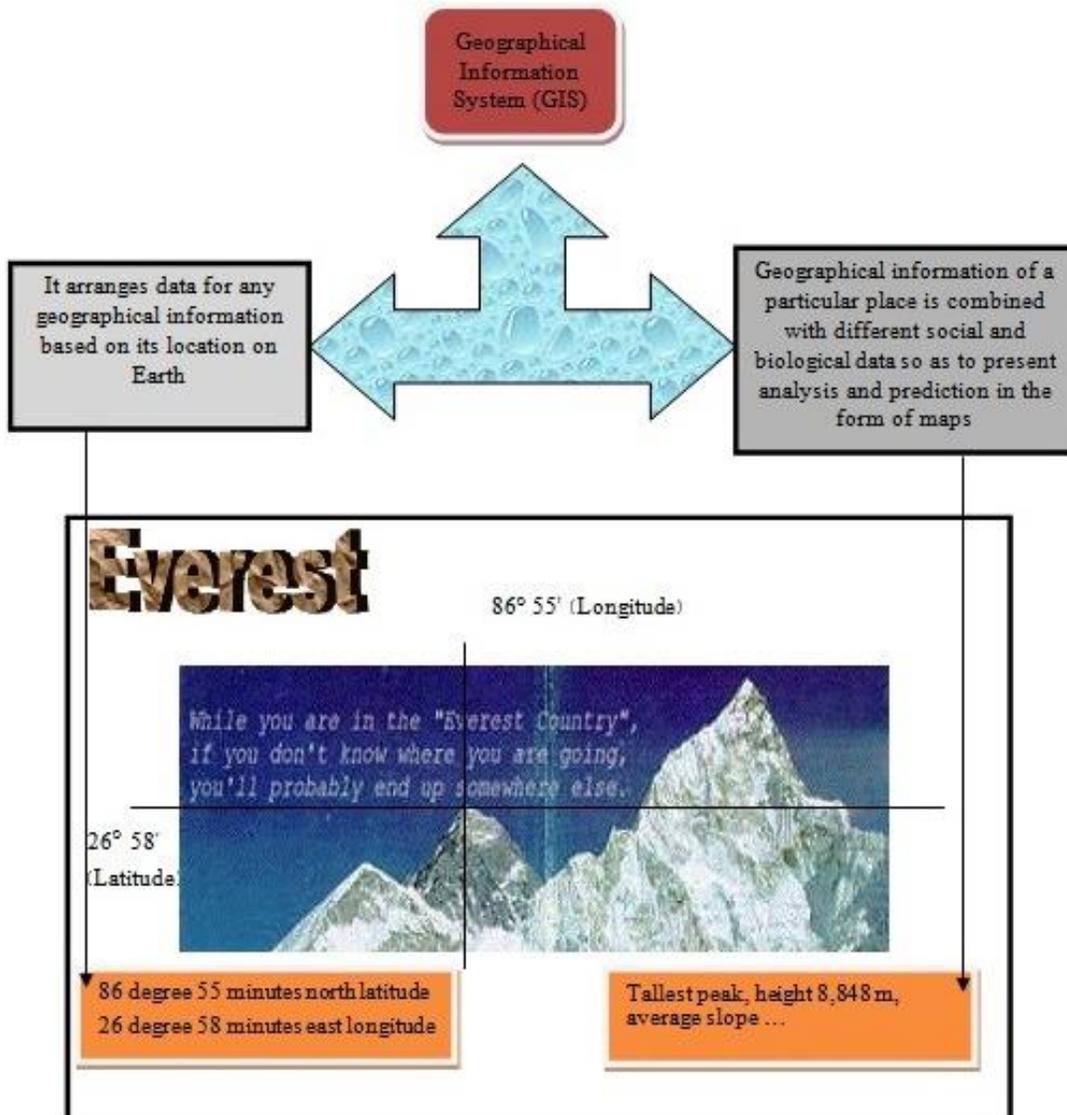
हुलाक सेवा संख्या

उप-स्वास्थ्य केन्द्र संख्या

D. Information about Geographical Information System (GIS)

1. Introduction

A software based advanced method of presenting the geographic information (geographic location, geological formation, slope, height, boundary, etc.) of any place in the form of map by collecting, managing and analyzing such information is called GIS.



More lately, GIS is being extensively used as a modern technology in the field of agriculture, health, security, traffic management, crime, natural resource protection, mine research, etc. With the use of this technology, geographic information of any place (VDC in this case) can be presented in the form of map or figure (both in hard and soft copy) making it easier, even for laymen, to study, understand and analyze the exact situation.

Source maps representing overall situation of VDC are necessary during the formation of VDC level plan. These maps, if prepared via GIS, are able to depict the exact geographic location (latitude/longitude), length, area, slope, etc. making the measurement and analysis of different attributes of a VDC easier. Electronic copy of such GIS maps can be stored and used at any time and place. Moreover, the map can also be updated with new information by adding on or removing information stored earlier. ArcGIS, ArcView, ILWIS are some of the computer software using for mapping and analysis based on GIS method. With the help of these software (named above), a well-trained expert puts geographic information about VDC in maps and use it for the VDC level plan.

2. Geographic information included in VDC level plan

- Administrative location of the VDC (district, zone, development region, etc.)
- Geographic location and spreading out (latitude and longitude)
- VDC Boundary (geographic as well administrative boundaries depicting exactly the neighboring VDCs and subjects marking the boundaries)
- Height (average height from the sea level, description of the lowest and highest place, height of major places)
- Area of VDC and wards within it.
- Kinds of land use and area (farmland, water area, forest, etc.)
- Geological formation of VDC (analysis of ground surface situation, slope and its different aspects, etc.)
- Geological information (structural features of land, types and description of stone and mud, natural resource and mineral distribution, sensitively of land and disaster)

2.1 Use of map to identify problems and resources during VDC plan formulation

Social and resource maps of VDC are required during the plan formulation stage. Indicating all social infrastructures like road, school, health post, source of drinking water, etc., social and resource maps are prepared. These maps clearly show the availability, need and situation of infrastructural access by the local people.

While formulating the plan, through the help of maps, needs of the VDC and ways to make it accessible to maximum number of people should be discussed. From the map presentation meeting, during the plan formulation, the activities that come up from the discussion is selected as plans. The maps are also presented in the ward level meeting and the required activities are noted to be included in the plan.

3. Use of GIS in VDC plan

During the preparation of VDC level plan, using GIS, different maps are prepared with information from various sectors. Below listed are some examples which show how these maps are used during the plan formulation stage.

- **Social map**

Since the social map prepared from GIS is in scale, the area of various wards and VDC can be measured from this map. In addition, this can be used in several areas during the plan formulation. For example, the biggest ward in the VDC, present situation of road network and its length, distance of schools from different communities, communities close to sources of drinking water, length of alternative roads, place suitable to build new school, the way new road should take in order to incorporate maximum number of people, the wards and places to be prioritized in the plan formulation, etc. can be found out with the help of this map.

- **Land use map**

During the VDC plan formulation stage, this map is used to analyze the land use patterns in VDC with their respective area, to examine the compatibility of prevalent land use with respect to the heights and geological formation of different areas in VDC, to plan the place and type of future land use, to find out suitable area for market extension, to know about the present situation of forest and to find out the most suitable as well as beneficial area for future afforestation program, to know about the area covered by river bank as well as sand and to locate proper place for crusher industry that could be established later, to plan about irrigation system, etc.

- **Disaster vulnerability map**

From this map, in the plan formulation stage, it is easier to locate places which are vulnerable to natural disasters and calamities like flood, landslide, soil erosion, etc. and plan a strategy so as to mitigate or at least minimize the effects of such natural disasters. Likewise, place suitable to build big infrastructural projects, safe place for extension of human settlement, place to extended economic activities, possible areas suitable for reestablishment and so forth can also be decided on with the help of disaster vulnerability map.

- **Plan map**

These are the maps which comparatively present various baseline information of the VDC with the desired scenario (also in maps), after the implementation of the plan. For example, comparison between present (baseline) and future (desired) road network can be done with the help of this map which will, in turn, give some idea about the desired scenario.

Likewise, the same process, as required, can be repeated to compare agricultural, forestry, tourism, etc. scenarios.

4. Methods for the preparation of Geographic Information of VDC

The first and foremost activity before going to field survey for data collection is to get hold of base maps and other reference materials available in the form of old maps, topographical maps, satellite maps, aerial photos, etc. These maps are available in the concerned VDC, DDC, different organizations. Likewise, from the Survey Department of Nepal Government, official topographical maps and aerial photos can be obtained. These maps are generally used to get basic information related to boundary, height, land use pattern, etc. of a VDC. In addition to

these maps, from the help and consultation with local peoples, other maps can also be prepared to depict social conditions, resources distribution, etc. which is sure to help in periodic plan formulation.

Methods

1. Different maps, aerial photos and satellite images of the VDC are collected.
2. Field survey: On the basis of collected photos and maps, following works should be done in field survey.
 - In the field, identify and confirm the boundary of VDC and correct it as required.
 - From the field survey, boundaries of different wards in VDC are identified and mapped.
 - Map the land-use [field, forest (along with the types and situation as per requirement), landslide, river-rivulets, etc.] as given in the reference map and found in field survey.
 - Various situational systems, natural diversities, distribution of resources, etc. as shown in previous maps should be compared with field observation and updated as per necessity.
 - All of the other information (like the position of school, health post, roads, temples, touristic place, offices, conservation area, etc.) needed should be mapped. While mapping these places, it is very important to locate its actual geographical location (latitude, longitude). For the purpose, GPS (Global Positioning System), a latest technology, which works in connection with satellite, can be used. Available in Nepali market, this technology can be bought in reasonable price.
3. Basic maps prepared from GIS are analyzed.
4. The maps prepared are presented in local level meeting and discussion is done over the analysis done in the preceding step.
5. Different actives are selected to be included in plan.

5. Maps prepared from GIS

As per the requirement, different types of maps are prepared to show the situation and need of VDC. Different types of maps prepared by the use of GIS, along with their examples, are listed below.

Social map

A map that presents and incorporates within it the VDC boundary, ward division, area of different settlement/community, road network, health post, schools along with other important societal infrastructure and features.

Land use map

A scaled map showing the land used as field, forest, human settlement, etc. along with their situation and types as well as area.

Disaster vulnerability map

A map prepared by analyzing the overall situation of disaster and geo-sensitivity clearly showing the disaster prone and possible areas suitable for reestablishment.

Plan map

These are the maps which comparatively present various baseline information of the VDC with the desired scenario (also in maps), after the implementation of the plan. For example, comparison between present (baseline) and future (desired) road network can be done with the help of this map. Likewise, the same process, as per requirement, can be repeated to compare agricultural, forestry, tourism, etc. scenarios. With the help of these maps, it is easier to clarify the plan in a way understandable by all.

Ward-wise population density map

Ward-wise population density of all the wards in a VDC is shown in this map.

Except the maps listed above, depending upon the need and relevance, the below listed types of maps can also be prepared using different information.

Natural resource distribution map

Show the situation of minerals and natural resource distribution inside a VDC through this map.

Slope map

The average geological formation, slope, aspects, etc. of a VDC is shown in this map.

Water resource map

Map showing the situation of water resources including all of the rivers, rivulets and other means of water.

Environmental map

Map showing the situation of solid waste and pollution including other environmental aspects along with the possibility of managing them.

E. Methods for climate change analysis

In order to collect this information, community level meeting or discussion method should be adopted.

Time line

Introduction

Timeline is a method to study the climate change, calamities induced and damage done by climate change in the past.

Use

Using this method, important time that marks the impacts of climate change induced calamities on agricultural production and food security are recorded. Especially, the discussion should be focused on following subjects listed below and important dangerous dates are documented.

- a. Description of important climate change induced calamities faced by community in the past 30 years.
- b. Changes in land use (agriculture, forest, urbanization) pattern, changes in land ownership (land registration, time of boundary separation and demarcation) system, changes in food security and epidemic, administrative and organizational structural change, etc.

Analysis

If climate change induced problem/s is/are found to have repeatedly occurred and has/have done more damage compared to past, the place can be analyzed as climate change effected region.

Disaster and catastrophe prioritization

Introduction

Hazards and calamities that have gravely affected community are identified and prioritized from this step.

Use

Like the way illustrated in the example below, all of the calamities are listed in a column and the same calamities are also kept in row. Then, a calamity in the column is compared against the other calamity in the row and the calamity which has/had graver affects is written in their common box.

CALAMITIES	Drought	Landslide	Flood	Hailstorm
Drought	X	Drought	Drought	Hailstorm
Landslide	X	X	Landslide	Hailstorm
Flood	X	X	X	Flood
Hailstorm	X	X	X	X
Total	2	1	1	2
Priority	I	III	III	II

Analysis

After repeating the process for all of the calamities, the calamity which is selected highest number of time is prioritized as first and rule of descending order is applied to select second, third, fourth priority.

Disaster and catastrophe mapping

Introduction

This method is used to identify and map different impacts on livelihood of people living in the area under the risk of climate induced calamities.

Use

From the tole meeting, resource map of the VDC is prepared. In the resource map, the impacts or damage caused by climate induced calamities on the community's physical infrastructure, settlement and sources of livelihood are indicated by some indicators. Here, the impacts of calamities on agriculture and livestock farming are carefully noted.

Analysis

From the map prepared, an analysis is done to find out whether the livelihood sources of community are in danger from climate changed induced calamities or not.

Seasonal calendar analysis

Introduction

In order to study about the climate induced calamities and the problems caused by it (like: famine, disease, flood, drought, storms, wildfire, hailstorm, etc.) to the community at any time, season or month, both in past and present, seasonal calendar is used.

Use

In a table, main calamities are listed in left column along with the months in the first row. Then, month of occurrence of the main calamities, both in the past and in the present, is marked to see if there is any change in the occurrence of calamities.

Months →	Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
↓ Main calamities													
	Flood	Before											
		After											
Landslide	Before												
	After												
Hailstorm	Before												
	After												

Analysis

From this method, different climate induced calamities (like: famine, disease, flood, drought, storms, wildfire, hailstorm, etc.) faced by communities at different time and strategies employed by them to deal with the change are discussed and analyzed.

Crop calendar analysis

Introduction

A method to comparatively study the changes in farming system of various crops over a period of time (divided in months) is called crop calendar analysis.

Use

The way to use crop calendar is similar to that of seasonal calendar. Here, discussion is done over the issues related to agricultural crops. In this method, information regarding the plantation, weeding, irrigation, harvesting and storing time practiced by community for various crops are noted and discussed.

Analysis

While discussing about crop calendar, people should be asked about changes, if any, they have observed in the plantation, weeding and harvesting time of a crop. If there has been change in plantation and harvesting, based on group discussion, methods taken-up by them for adaption and mitigation is discussed.

Months →	Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
↓ Main Crops	Millet	Before											
		After											
Maize	Before												
	After												
Potato	Before												
	After												

Risk Analysis

Introduction

A method to analyze the impacts of climate change in community, agriculture and food security in particular, is called impacts and risk analysis.

Use

Before using this method, society's livelihood sources are identified. After source identification, it is easier to discuss about the risk posed by main calamities (outcome of calamities prioritized) over livelihood sources. For the discussion, DFID (Department for International Development)'s Livelihood Framework listed below can be used.

Sources of livelihood

1. Natural capital	2. Economic capital	5. Social capital
Trees Medicinal plants Wild animals	Cash Pension Jewelry Savings Foreign currency	Social structure Social institutions Social organization
3. Physical capital	4. Human capital	
Road, tap, irrigation system Industry Market Communications	Education Health Art and ability Indigenous knowledge and skills	

Analysis

The source with highest weightage is at higher risk and the society is at greater risk from the calamity having highest sum value (weightage). Sometimes, though the sum value might be low, some calamities pose significant risk to certain livelihood source.

Risk analysis of climate change on sources of livelihood

Sources of livelihood	Climate induced calamities (measured in the scale of 0 to 3 for the effects identification)			Total
	Drought/ Frost	Heavy rain	Landslide	
<i>Natural capital</i>				
Forest				
Medicinal plants				
Field				

Effects and adaptation practices

Introduction

The process of identifying the effects of climate change induced calamities over different sources of livelihood and the various ways applied by community to deal with the problems is called effects and adaptation practices.

Use

Climate change induced calamities are listed in the far left column of a table and sources of livelihood under risk from them are identified. Methods and ways applied by community to lower the effects (adaptation and mitigation) of calamities are discussed in groups. Finally, success levels of such method are analyzed.

Analysis of climate change effects and adaptation practices

Climate	Affected source of livelihood	Impacts
1. Drought		
2. Flood		

Analysis

Community, with the help of whatever resource, method, knowledge and skills it has, is always adapting and mitigating to climate change induced calamities. The strategies adopted might be both - sustainable and unsustainable. In this context, discussion over the strategies will help in identification and implementation of the most suitable strategy, sometimes in larger scale also.

Annexes

Annex 1: Integrated plan formulation committee

Article 27 of Local Self-Governance Act 2055 and rule 48 of the Local Self-Governance Regulation 2056 have provisioned for an advisory committee. Based on this provision made in the act and regulation, **VDC grant usage directive** 2067 has advised for an integrated committee. As per the provision of the directive, for the successful implementation of VDC level plan, an integrated plan formulation committee is formed as mentioned below.

S.N	Description	Designation	Number
1.	Chairman of the VDC or personnel recommended by him	Coordinator	1
2.	Representative of each political parties in all-party committee of the VDC	Member	1
3.	A representative selected from within the NGOs working in the VDC	Member	1
4.	A female representative selected from within the community organizations working inside VDC	Member	1
5.	A representative selected from within the Dalit organizations working inside the VDC	Member	1
6.	Representatives selected from within the female organizations (like mothers group, female cooperatives, etc.) working in the VDC	Member	2
7.	A child representative selected from within the children clubs working in the VDC	Member	1
8.	A representative selected from within the caste and ethnicity related organizations working in the VDC	Member	1
9.	If applicable, a representative from marginalized community selected from within the community by related people or organizations.	Member	1
10	VDC secretary	Member secretary	1

Annex 2: Monthly time table for yearly plan formulation process

S.N	Activities	Kartik				Mangsir				Poush				Magh			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Budget ceiling received from VDC through Nepal government	█	█	█	█												
2	Estimate human and financial resources for the coming fiscal year					█	█	█	█								
3	VDC sends guideline to all wards									█							
4	Organize a pre-plan formulation workshop at ward level										█						
5	Plans are prioritized and sent by ward committees to the VDC										█						
6	Draft of VDC plan is prepared (in VDC) and decisions on it is made											█					
7	Plan accepted by VDC council												█				
8	A list of plans to be implemented by VDC itself should be send to DDC													█	█	█	█
9	Projects which are out of the VDC's sources, means and capacity should be sent to DDC along with their prioritization.													█	█	█	█

Annex 3: Model framework for periodic sustainable development plan

Section 1: Introduction

1. Background to periodic sustainable development plan
2. Goals and objectives
3. Methodology
4. Policy and legal provisions of VDC level periodic plan
5. Relation with national and district periodic plan
6. Relation between periodic and yearly village development plan
7. Users of VDC level periodic plan
8. Scope and limitations of periodic plan
9. Stage of planning and techniques
10. Periodic review and update

Section 2: Framework for presenting village profile of the VDC

1. Introduction of VDC
 - 1.1 Geographic description
 - 1.2 Demographic information
 - 1.3 Settlement and Production
 - 1.4 Economic and employment situation
 - 1.5 Geological description
 - 1.6 Land use map (with area)
2. Physical infrastructure
3. Social infrastructure
4. Forest and environment
5. Agriculture
6. Resource and ability of VDC

Section 3: Descriptive framework for periodic sustainable development plan

1. Strengths and Opportunities of VDC
2. Weakness and Threats of VDC
3. Past efforts and achievements
4. Long-term thinking, goal & objectives and strategies
5. Directive Principles
6. Sector-wise development priorities
7. Main programs and prioritized plans
8. VDC resource and strength analysis
9. Indicators of VDC activities
10. Plans selection and budget
11. Situation of investment in VDC and prediction for next five years

12. Management of extra budget
13. Duties and responsibilities of stakeholders in VDC
14. Integrated model for monitoring and evaluation of the plan
15. Monitoring and evaluation method

NCDC's Message

- For the process of sustainable development, let's adopt participatory and planned mode of operation.
- Let's promote volunteerism for the creation of self-reliant, equitable and inclusive Nepali society.
- To save our planet, let's preserve local biodiversity and environment.
- Let's promote, use and adopt alternative source (hydropower, bio, solar) of energy.
- For healthy living, let's prioritize Improved Cooking Stove (ICS) at local level.
- Let's electrify our villages utilizing the water going waste in our local river, rivulets by the use of peltric set and micro hydropower.
- From the use of improved water mill, let's utilize local resources to increase income levels.
- Let's protect local water sources and keep the environment clean.
- By minimizing the use of chemical fertilizers, herbicides and pesticides, let's promote sustainable agriculture system.
- Let's develop democratic culture in society.



Namsaling Community Development Center (NCDC)

Ilam Municipality – 7, Dhobidhara, Ilam, Nepal

Tel. No.: +977-27-520411, 520792

Fax No.: +977-27-520792

E-mail: ncdcilam@ntc.net.np

Website: www.ncdcilam.org.np