

LUMANG GEWOG
NINTH PLAN
(2002-2007)



TRASHIGANG DZONGKHAG
ROYAL GOVERNMENT OF BHUTAN

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1. Current Situation

Lumang gewog has 32 villages with 744 households covering an area of 103 square kilometres.

Over two hundred households have access to electricity. Drinking water supply coverage in the gewog is over 70% as of December 2001.

The gewog has five schools delivering education to over 1,400 children. Child immunization coverage in the gewog stands at 90%. There are 54 telephone connections, mostly in Riserboo hospital and drungkhag office.

Dry land farming is widely practiced with limited land available for paddy. Potato and oranges are grown for cash income.

Major land use types at Lumang, 1995 (ha)

Land use types	Land record data
Agricultural land	
Chhuzhing (wetland)	5
Kamzhing (dryland)	456
Pangzhing (grass fallow land)	14
Tseri (shifting cultivation land)	532
Total arable land	1008

Source: Land record data: Survey of Bhutan (1995)

2. Summary of Gewog Plan Outlay

Nu.in million

Sl. No.	Programme	Budget Outlay			Remarks
		Current	Capital	Total	
1	Agriculture Program	0.000	40.508	40.508	
2	Livestock Program	0.000	0.673	0.673	
3	Forestry Program	0.000	0.763	0.763	
4	Education Program	0.000	3.980	3.980	
5	Health Program	0.000	2.464	2.464	
6	Suspension Bridges & Mule Tracks	0.000	0.590	0.590	
7	Gewog Administration	0.370	1.150	1.520	
	Total	0.370	50.128	50.498	

3. Gewog Development Programmes

Agriculture Programs

Maize Improvement

To increase the production of maize, it is proposed to conduct demonstrations and promotional activities in the ninth plan.

Oilseeds Improvement

Ten demonstration and promotion of high yield variety of mustard has been planned during the ninth plan.

Horticultural Crop Improvement

The following horticultural commodities were prioritised and planned for improvement during the ninth plan:

- Potato improvement
- Other temperate fruits (apple, plum) cultivation
- Citrus orchard development
- Vegetable cultivation
- Mushroom cultivation.

The improvement proposed were:

1. Demonstration on improved potato cultivation.
2. Establishment of citrus demonstration orchard.
3. Promotion of improved varieties of citrus, other temperate fruit (apple, plum) and vegetable seeds.
4. Demonstration on off-season vegetable on commercial basis.
5. Demonstration on Shitake mushroom production.

Farm Road to Dungmanma

It is proposed to construct 38 km farm roads from Zugpola to Dungmanma through Kurichiloo. Lumang is one of the five gewogs that is not connected with any motorable roads. Lumang gewog has good potential for horticultural and cereal crop productions.

Construction of Market Shed at Wamrong

Presently, farmers of Lumang, Khaling and Nanong gewogs do not have an access to market to sell their produce. Therefore, a Sunday market shed is proposed at Wamrong.

Demonstration on SALT

To conserve soil fertility, it is proposed to conduct Slope Area Land Technology demonstration in the gewog.

Institutional and Capacity Development

Under the institution and capacity development, the following activities were proposed during the plan period:

- Farmers study tour
- Farmers training on improved crop cultivation and post harvest aspects.

Accordingly, the objectives of the sub-program has been formulated as follows:

- To share experience with other farmers and to expose the farmers to other demonstrative activities within and outside the Dzongkhag to inculcate learning by seeing,
- To change the farmer's skill, attitude and knowledge.

Livestock Programs

Backyard Dairy Farming

Based on the priority of farmers at least 100 units of small scale backyard dairy farm with a minimum of two milking cows of improved breed will be set up during the ninth plan. The loan for the same will be made available to the interested farmers through BDFC and technical backstopping on dairy management will be given by the livestock sector.

Backyard Poultry Farming

Almost all the farmers in the gewog keep a few poultry birds for egg production. 250 to 500 improved pullets will be made available for sale to farmers for establishing at least 50 units of poultry backyard farms with an minimum of five to ten birds per unit.

Piggery Backyard Farming

During the plan period, at least 25 units of backyard pig farming will be initiated with a minimum of two improved piglets per unit. 50 piglets will be made available for establishing the units. The technical backstopping will be provided by the livestock sector.

Livestock Breed Improvement

Based on farmers demand, the dzongkhag will procure and distribute two jersey cross bulls and two pure jersey bulls and at least 600 doses of semen will be made available during the plan if proposed AI centre is able to be established. Further, one halflinger stallion will be supplied to the remote village for breeding and three nublans, one mithun bull and one donkey stallion will be made available on cash and carry system.

Feed and Fodder Development

50 acres of improved pasture will be developed in the gewog by the interested farmers with free inputs of pasture seeds of 8,000 number of fodder tree seedlings during the plan period.

Institutional and Capacity Development

Under this program a total of 200 farmers will be given training in different livestock management system such as dairy, poultry and piggery to enhance skills and knowledge of the farmers on improved livestock management.

In addition, 50 interested farmers will be taken on in country study tour to different livestock farms and other dzongkhag to boost the knowledge through practical observation and information sharing among the experienced farmers.

Training of Village Animal Health Workers

To make delivery of the animal health services cost effective and efficient at least five village animal health workers (VAHW) will be trained in basic animal health services like deworming, vaccination and minor clinical treatment in their locality.

Livestock Promotion

In order to raise public awareness about the benefit of rearing improved breeds, the cattle shows and exhibitions have been planned in the ninth plan. Further, it includes activities such as pasture development aspects and crop residue treatment.

Forestry Programs

Private Forestry

The main objective of the private forestry is to promote tree planting in private registered land. About ten acres of private land will be brought under private forestry and 4,2857 number of tree seedlings will be raised and supplied by the private nursery operator in the gewog. Also about 5,000 bamboo suckers will be planted at the strategic location.

Forest Fire Management

Forest fire protection has been recognised as one of the important programs. To have effective forest fire control, the Forestry sector will purchase fire fighting equipment and distribute to the gewog. It is also proposed to demarcate fire line during the forest fire out break by the public.

Institutional and Capacity Development

In order to create people's awareness on Forest & Nature Conservation Rules and to enhance the knowledge on forest management, the following activities have been planned during the ninth plan:

1. Farmers training on Forest Fire Control
2. Farmers training on nursery raising
3. Environmental awareness workshop
4. Farmers study tour

Education Programs

Moshi Community Primary School

Moshi Community Primary School was established in 1999 and has three sections with 136 students. The activities proposed in the ninth plan are construction of staff quarters, additional classrooms, development of play field, administrative block, science lab and library, MPH, toilet and acquisition of land and electrification of school. The supply of equipment, furniture, computers and materials for renovation and expansion are also proposed.

Kurichiloo Community School

Kurichiloo Community Primary School was established in 1987 and has seven sections with 110 students. The activities proposed are construction of staff quarters, additional classrooms, administrative block, science lab and library, MPH, toilet and electrification of school. The supply of equipment, furniture, computers and materials for renovation and expansion are also proposed.

Dungmanma Community School

Dungmanma Community Primary School was established in 2000 and has one section with 37 students. The proposed activities in the ninth plan are construction of staff quarters, additional classrooms, administrative block, science lab and library, MPH, toilet and development of play field, electrification of school. The supply of equipment, furniture, computers and materials for renovation and expansion are also proposed.

Tshogoenpa Community Primary School

The activities proposed for the school are construction of staff quarters, additional classrooms, administrative block, science lab and library, MPH and toilet. The supply of equipment, furniture, computers and materials for renovation and expansion are also proposed.

Health Programs

Construction of RWSS

The coverage of rural water supply is low compared to other gewogs and as such the construction of 18 new schemes have been proposed during the ninth plan for the following communities.

Sl.No.	Location	Household Beneficiaries
1	Dungmanma	20 household
2	Dori/Tsanu/Darung	
3	Denu and Sayu (23HH)	23
4	Khudin & Regi (18HH)	18
5	Kheri & Gaphu (13HH)	13
6	Kharjang	
7	Mochema (12HH)	12
8	Tshogon (20HH)	20
9	Khargoen	
10	Wonbugang	
11	Serthang	
12	Tsangpo	

Rehabilitation of RWSS

The existing schemes in Kherphu, Dupkhang, Kurichiloo, Lumang, Chengri, Dagala, and Chenula are out of order and needs renovation. Most of these schemes were damaged by the landslides and supply of pipes and cements are requested for renovation.

Spring Source Protection

Two spring source protections are proposed at Lucheloo village and Lumang School for perennial water source and clean & safe drinking water.

Suspension Bridge and Mule Track Programs

Construction of Mule Track

For easy, fast and safer travelling and transportation in the gewog, it is proposed to construct three new mule tracks as mentioned below:

1. Bemri – Chengri (10 Kms)
2. Dupkhang – Kharphug (9 Kms)
3. Kharphu – Riserboo (8 Kms)

Mule Track Improvement

The mule tracks from Dori – Nanong BHU (14 km) and Dori – Lumang (10) are narrow and as such draught animals find it difficult to use it. Therefore, it is proposed to improve the existing mule tracks in the ninth plan.

Telecom Program

Rural telecommunications

For easy and faster communication especially during the emergency and security reasons, the proposal have been sent to the Bhutan Telecom Authority to install telephones in Gup Office, residents, Schools, RNR office and BHU.

Gewog Administration and Management

Renovation of Lhakhangs

Moshi Lhakang and Kharphu Lhakhang are very old and requires a major renovation. Therefore, the public of Moshi and Kharphu has requested for renovation and planned during the ninth plan.

Construction of Gup's Office

To enable the Gup to shoulder the increasing roles and responsibilities as per the decentralisation policy, it is a mandatory to have a proper office. Accordingly, the public of the gewog have proposed for a gup's office at Lumang, which is at a central location. It is also proposed to provide the Gups with office equipment, furniture and stationary in the ninth plan.

4. Budget Estimates

Nu. in million

Sl. No.	Programmes	Unit	Target	Budget			Remarks
				Current	Capital	Total	
1	Maize Improvement Program						
1.1	Demonstration	Nos.	10	0.000	0.050	0.050	
1.2	Promotion of HYV	Acre.	50	0.000	0.019	0.019	
	Sub-total			0.000	0.069	0.069	
2	Oilseeds Improvement						
2.1	Demonstration on mustard	Nos.	10	0.000	0.050	0.050	
2.2	Promotion of HYV	Acre.	50	0.000	0.005	0.005	
	Sub-total			0.000	0.055	0.055	
3	Horticulture Improvement						
3.1	Demonstration on Potato	Nos.	15	0.000	0.075	0.075	
3.2	Promo. of apple & plum	Acre.	10	0.000	0.020	0.020	
3.3	Promotion of citrus	Acre.	10	0.000	0.020	0.020	
3.4	Demonstration on orchard of citrus	Nos.	5	0.000	0.010	0.010	
3.5	Demo. on commercial veg. Cultivation	Nos.	20	0.000	0.020	0.020	
3.6	Promo. of improved vegetable varieties	pkt	5000	0.000	0.100	0.100	
3.7	Demonstration on Shitake cultivation	Billet	1000	0.000	0.004	0.004	Nu. 4 per billet
	Sub-total			0.000	0.249	0.249	
4	Farm Roads						
4.1	Road from Zukpola to Kurichiloo	Km	38	0.000	38.000	38.000	
	Sub-total			0.000	38.000	38.000	
5	Construction of Market Shed						
5.1	Construction of vegetable shed	Nos.	1	0.000	1.500	1.500	
	Sub-total			0.000	1.500	1.500	
6	Demonstration on SALT						
6.1	Demonstration on SALT	Nos.	5	0.000	0.500	0.500	
	Sub-total			0.000	0.500	0.500	
7	Institutional & Capacity Development						
7.1	Farmers Trg on improved crop culti.	HH.	500	0.000	0.060	0.060	
7.2	Farmers study tour to RNR-RC	HH.	15	0.000	0.075	0.075	
	Sub-total			0.000	0.135	0.135	
	Total			0.000	40.508	40.508	

8	Livestock Breed Improvement						
8.1	Backyard poultry farming	Unit	50	0.000	0.000	0.000	BDFC Loan
8.2	Backyard Piggery farming	Unit	25	0.000	0.000	0.000	BDFC Loan
8.3	Backyard Dairy farming (Jersey)	Unit	100	0.000	0.000	0.000	BDFC Loan
8.4	Sale of Mithun bull	Nos	1	0.000	0.000	0.000	
8.5	Sale of Nublang bull	Nos	3	0.000	0.000	0.000	
8.6	Supply of Jersey Cross bull	Nos	2	0.000	0.016	0.016	
8.7	Supply of Jersey Cross bull	Nos	2	0.000	0.024	0.024	
8.8	Supply of Pure Halfilinger stallion	Nos	1	0.000	0.016	0.016	
8.9	Sale of Donkey	Nos	1	0.000	0.000	0.000	
	Sub-total			0.000	0.056	0.056	
9	Feed & Fodder Development						
9.1	Pasture development	Acre	50	0.000	0.100	0.100	
9.2	Fodder tree plantation	Nos	8000	0.000	0.032	0.032	
	Sub-total			0.000	0.132	0.132	
10	Institutional & Capacity Development						
10.1	Farmers trg on dairy, poultry, piggery and Pasture	Nos	200	0.000	0.280	0.280	
10.2	Farmers Study tour	Nos	50	0.000	0.080	0.080	
	Sub-total			0.000	0.360	0.360	
11	Training of VAHWs						
11.1	VAHW training	Nos	5	0.000	0.025	0.025	
	Sub-total			0.000	0.025	0.025	
12	Livestock Promotion						
12.1	Demo. on pasture development, crop residue treatment	Nos	5	0.000	0.050	0.050	
12.2	Cattle show/exhibition	Nos	1	0.000	0.050	0.050	
	Sub-total			0.000	0.100	0.100	
	Total			0.000	0.673	0.673	
12	Private Forestry						
12.1	Private Forest	Acre	10	0.000	0.005	0.005	Nu. 500/- acre
12.2	Bamboo plantation	Nos	5000	0.000	0.250	0.250	Nu. 50/- rhizome
12.3	Private Nursery	Nos	42857	0.000	0.172	0.172	Nu. 4/- seedling
	Sub-total			0.000	0.427	0.427	
13	Fire Management and Control						
13.1	Fire Management and Control		2	0.000	0.040	0.040	
	Sub-total			0.000	0.040	0.040	
14	Institutional & Capacity Development						

14.1	Nursery training	Nos	2	0.000	0.090	0.090	
14.2	Forest fire control training	Nos	2	0.000	0.036	0.036	
14.3	Farmers study tour	Nos	2	0.000	0.140	0.140	
14.4	Environmental awareness	Nos	2	0.000	0.030	0.030	
	Sub-total			0.000	0.296	0.296	
	Total			0.000	0.763	0.763	
15	Moshi Community Primary School						
15.1	Construction of Triple Unit classrooms		1	0.000	0.300	0.300	
15.2	Construction of toilets		1	0.000	0.100	0.100	
15.3	Construction of staff qtrs double unit		1	0.000	0.100	0.100	
15.4	Purchase of office equipment			0.000	0.080	0.080	
15.5	Purchase of furniture			0.000	0.150	0.150	
15.6	Library Books			0.000	0.150	0.150	
15.7	Purchase of computers		3	0.000	0.160	0.160	
15.8	Establishment Cost			0.000	0.000	0.000	Estab.cost Nu.4.810
	Sub-Total			0.000	1.040	1.040	
16	Kurichiloo Community PS						
16.1	Construction of classroom tripple unit		1	0.000	0.300	0.300	
16.2	Const. of toilets-Aqua privy 6 units	1	0.000	0.100	0.100		
16.3	Renovation and expansion			0.000	0.100	0.100	
16.4	Purchase of office equipment		1	0.000	0.080	0.080	
16.5	Purchase of furniture			0.000	0.060	0.060	
16.6	Library Books			0.000	0.150	0.150	
16.7	Purchase of computers		3	0.000	0.160	0.160	
16.8	Establishment Cost			0.000	0.000	0.000	Estab.cost Nu.5.174
	Sub-total			0.000	0.850	0.850	
17	Dungmanma Community Primary School						
17.1	Construction of Triple Unit classrooms		1	0.000	0.300	0.300	
17.2	Const. of toilets-Aqua privy 6 units		1	0.000	0.100	0.100	
17.3	Renovaiton and expansion			0.000	0.100	0.100	
17.4	Purchase of furniture		1	0.000	0.150	0.150	
17.5	Purchase of equipment			0.000	0.080	0.080	
17.6	Library Books			0.000	0.150	0.150	
17.7	Purchase of computers		3	0.000	0.160	0.160	
17.8	Establishment Cost			0.000	0.000	0.000	Estab.cost Nu.3.486

	Sub-total			0.000	1.040	1.040	
18	Tshogonpa Community PS						
18.1	Construction of classroom tripple unit		1	0.000	0.300	0.300	
18.2	Construction of head teachers qtr		1	0.000	0.100	0.100	
18.3	Construction of aquaprivy toilet 6 units		1	0.000	0.100	0.100	
18.4	Purchase of office equipment		1	0.000	0.080	0.080	
18.5	Purchase of furniture		1	0.000	0.060	0.060	
18.6	Library Books			0.000	0.150	0.150	
18.7	Purchase of computers		3	0.000	0.160	0.160	
18.8	Establishment Cost			0.000	0.000	0.000	Estab.cost Nu.6.290
	Sub-total			0.000	0.950	0.950	
	Total			0.000	3.980	3.980	
19	Construction of RWSS						
19.1	Dungmanma (20HH)	Nos.	1	0.000	0.132	0.132	
19.2	Dori/Tsanu/Darung	Nos.	1	0.000	0.132	0.132	
19.3	Denu and Sayu (23HH)	Nos.	1	0.000	0.132	0.132	
19.4	Khudin & Regi (18HH)	Nos.	1	0.000	0.132	0.132	
19.5	Kheri & Gaphu (13HH)	Nos.	1	0.000	0.132	0.132	
19.6	Kharjang	Nos.	1	0.000	0.132	0.132	
19.7	Mochema (12HH)	Nos.	1	0.000	0.132	0.132	
19.8	Tshogon (20HH)	Nos.	1	0.000	0.132	0.132	
19.9	Khargoen	Nos.	1	0.000	0.132	0.132	
19.10	Wonbugang	Nos.	1	0.000	0.132	0.132	
19.11	Serthang	Nos.	1	0.000	0.132	0.132	
19.12	Tsangpo	Nos.	1	0.000	0.132	0.132	
	Sub-total			0.000	1.584	1.584	
20	Rehabilitation of RWSS						
20.1	Kherphu	Nos.	1	0.000	0.122	0.122	
20.2	Dupkhang	Nos.	1	0.000	0.122	0.122	
20.3	Kurchiloo	Nos.	1	0.000	0.122	0.122	
20.4	Lumang	Nos.	1	0.000	0.122	0.122	
20.5	Chengri	Nos.	1	0.000	0.122	0.122	
20.6	Dagala	Nos.	1	0.000	0.122	0.122	
20.7	Chenula	Nos.	1	0.000	0.122	0.122	
	Sub-total			0.000	0.854	0.854	
21	Spring Sources Protection						
21.1	Spring source protection at Lucheloo	Nos.	1	0.000	0.013	0.013	
21.2	Spring source protection at Lumang School	Nos.	1	0.000	0.013	0.013	
	Sub-total			0.000	0.026	0.026	
	Total			0.000	2.464	2.464	

22	Construction of Mule Tracks						
22.1	Bemri to Chengri	Km	10	0.000	0.100	0.100	
22.2	Drubkhang to Kharphug	Km	9	0.000	0.090	0.090	
22.3	Karphu to Riserboo	Km	8	0.000	0.080	0.080	
	Sub-total			0.000	0.270	0.270	
23	Mule Tracks Improvement						
23.1	Dori - Nanong BHU tracks	Km	14	0.000	0.070	0.070	
23.2	Dori – Lumang tracks	Km	10	0.000	0.050	0.050	
	Sub-total			0.000	0.120	0.120	
24	Maintenance of Suspension Bridges						
24.1	Demri Zam	Nos.	1	0.000	0.050	0.050	
24.2	Gari Zam	Nos.	1	0.000	0.050	0.050	
24.3	Dori Zam	Nos.	1	0.000	0.050	0.050	
24.4	Thromangjug zam	Nos.	1	0.000	0.050	0.050	
	Sub-total			0.000	0.200	0.200	
	Total			0.000	0.590	0.590	
25	Renovation Lhakhangs						
25.1	Moshi Lhakhang	Nos.	1	0.000	0.100	0.100	
25.2	Kharphu Lhakhang	Nos.	1	0.000	0.100	0.100	
	Sub-total			0.000	0.200	0.200	
26	Construction of gup's Office						
26.1	Construction of Gup office at Lumang	Nos.	1	0.000	0.800	0.800	
26.2	Purchase of furniture/equipment			0.000	0.150	0.150	
26.3	Establishment cost			0.370	0.000	0.370	
	Sub-total			0.370	0.950	1.320	
	Total			0.370	1.150	1.520	
	Grand total			0.370	50.128	50.498	

5. Plan Implementation, Monitoring and Evaluation

The GYT Chathrim 2002 delineates specific roles and responsibilities to all functionaries involved in development administration and management in the gewog. It is, however, deemed necessary to underscore some essential processes that must be observed in executing the above roles and responsibilities.

The financial powers and authority of the Gewog Administration for the implementation of the planned activities are also enshrined in the GYT Chathrim 2002.

Plan implementation

The Gup, GYT *Tshopas* and the community as a whole will take on full accountability and ownership of gewog development activities. The clear delineation of implementation time frames, responsibilities and contributions from the community should be developed for the effective implementation of gewog activities.

Annual and Quarterly Plans

Based on the Five-Year Plan, the Gup will prepare Annual Plans and Budgets (AP&B) in consultation with the gewog sectoral staff and submit it to GYT. After the GYT discusses and approves the Draft AP&B, it will be put up for approval to the DYT.

Once the DYT approves the AP&B, the GYT will develop a Quarterly Work Plan and Budget in consultation with the sectoral staffs and other functionaries in the gewog such as Mangmi, Chimi and Tshogpas. The implementation of the Quarterly Work Plan will be the responsibility of the Gup and the Tshogpas with technical support from the staff of the concerned sectors.

Based on the Quarterly Work Plan, the concerned sectoral staff responsible for the implementation of any planned activity will elaborate a detailed implementation plan and budget for approval and budget release by the Gup. Copy of this plan will be sent for information to the concerned sectoral heads and relevant agencies. Upon completion of the activity, the responsible person will submit a report to the Gup and the concerned sectoral heads and relevant agencies.

Monitoring and Evaluation

Monitoring

The GYT in the gewog will be responsible for progress and performance monitoring of the planned activities. The GYT should convene monthly meetings with technical staff and other responsible persons for implementation to review the progress in the implementation of every activity and to take timely corrective actions when required. The gewog will seek technical back-up services from the Dzongkhag Administration when necessary.

Based on the received reports and monthly meetings the Gup will submit a quarterly report to the Dzongkhag administration. Technical reports from the different sectors will be attached to the Gup's quarterly report.

The Gup will verify the travel claims of all sectoral personnel in the gewog so that the performance of the gewog staff can be monitored.

Evaluation

To assess the impact and benefit of development programs and projects in the gewogs, the Government will launch periodic evaluation missions in coordination with the Dzongkhag Administration.