

BUMDELING GEWOG
NINTH PLAN
(2002-2007)



TRASHIYANGTSE DZONGKHAG
ROYAL GOVERNMENT OF BHUTAN

TABLE OF CONTENT

1	CURRENT SITUATION	1
2	GEWOG PLAN OUTLAY	2
3	GEWOG DEVELOPMENT PROGRAMS	3
	AGRICULTURE PROGRAMS	3
	LIVESTOCK PROGRAMS	4
	FORESTRY PROGRAMS	5
	EDUCATION PROGRAMS	5
	HEALTH PROGRAMS	5
	SUSPENSION BRIDGE AND MULE TRACK PROGRAMS	6
	GEWOG ADMINISTRATION PROGRAMS	6
4	BUDGET ESTIMATE.....	7
5	PLAN IMPLEMENTATION, MONITORING AND EVALUATION	11
	PLAN IMPLEMENTATION	11
	<i>ANNUAL AND QUARTERLY PLANS</i>	11
	MONITORING AND EVALUATION	11
	<i>Monitoring</i>	11
	<i>Evaluation</i>	12

1 Current Situation

Bumdeling Gewog consist of 18 main villages with 307 households, covering an area of about 850.7 square kilometers. The Gewog shares its boundary with the Tibetan Region of China and Arunachal Pradesh of India.

Bumdeling is one of the two Gewogs in Trashiyangtse Dzongkhag which produces exquisite handmade wooden bowls and cups. The Gewog has about a dozen such units operational at the moment constituting one of the most lucrative cottage industries in the dzongkhag. About half a dozen hand made paper units are also found in the Gewog.

Paddy, maize, wheat, and buckwheat form the major crops. A small quantity of soft shell walnut is also grown. Oak mushroom (Shitake) cultivation is also picking up well. The average land holding is about 3.5 acres per household. Potato is the most important cash crop grown widely in the Gewog. The Gewog is self sufficient in livestock products.

Although, majority of the households have access to schooling facilities, the existing schools are still very far for 116 households. The children from these communities walk four hours a day to reach the nearest school. The GPER for the Gewog is estimated at 53% and the Pre Primary intake rate at 92%, which explains that more children are being admitted in the school.

The gewog has one Renewable Natural Resource (RNR) centre, Bumdeling Wildlife Sanctuary Warden's Office, two Primary Schools, one Community School and three Out Reach Clinics (ORC).

Land use pattern in the Geog

Land Use Types	Land Record Data (Registered)Acres	Land Use data (LUPS)Acres
Chhuzhing (wetland)	255	1270
Kamzhing (dry land)	338	2695
Pangzhing (grass fallow land)	138	-
Tseri (shifting cultivation)	319	1430
Mixed	-	1165
Orchard	6.08	-
Tsadrog (registered grazing land)	866	-
Sokshing (leaf litter plot)	142	-
Forest		
Coniferous (pine)	-	78,388
Broad leaf	-	53,118
Plantation	-	0
Scrub Forest	-	27,303
<i>Pasture (Natural)</i>	-	3,858
Settlement		
Others	-	43,400
Total	-	206,099.5

Major crop and production

Sl. No	Crop	Average Yield (Mt.)	Area (Acre)	Production inMt.
1	Paddy	0.95	207	195.96
2	Maize	0.9	61	54.97
3	Barley	0.8	14	11.2
3	Millet	0.8	326	261.65
4	Buckwheat	0.54	5	2.7
5	Soybean	0.8	6	4.8
6	Potato	5	40	200
7	Chilli	2	25	50
8	Asparagus		1.5	?
9	Mushroom		4000 billet	

Livestock Population in the Geog

Sl. No.	Type of livestock	Number
1	<i>Local Cattle</i>	1426
2	<i>Mithun Cross</i>	443
3	<i>Jersey Cross</i>	142
4	<i>Yaks</i>	343
5	<i>Local Pigs</i>	59
6	<i>Improved Pigs</i>	28
7	<i>Local Poultry</i>	312
8	<i>Improved Poultry</i>	300

2 Gewog Plan Outlay

Nu. in million

Sl.#	Sectors	Rec.	Cap.	Tot.	Remarks
1	Agriculture Program	0.000	19.254	19.254	
2	Livestock Program	0.000	0.611	0.611	
3	Forestry Program	0.000	0.010	0.010	
4	Education Program	0.000	4.040	4.040	
5	Health Program	0.000	3.260	3.260	
6	Suspension Bridge & Mule Track Program	0.000	2.442	2.442	
7	Geog Administration Program	0.370	1.130	1.500	
	Geog Grand Total	0.370	30.747	31.117	

3 Gewog Development Programs

Agriculture Programs

a) Cereal Crop improvement activities

The people of Bumdeling Gewog have identified wheat as priority crop for their Gewog. They have also selected mustard as priority oil seed for extraction of oil to substitute imported oil and gear toward the objective of self-sufficiency. Accordingly, the Dzongkhag shall provide farmers training, conduct demonstration and on-farm trials on improved variety of seeds and technologies, observe filed days and supply improved seeds in order to improve and enhance the production of these crops.

b) Horticulture Development

In order to enhance their income through horticulture development, the people of Bumdeling Gewog have prioritised walnut, apple, potato, vegetable, asparagus, mushroom and epiculture. The whole Gewog is suitable for potato cultivation. In most area under the Gewog apple can grow well. At the moment the potential has not been fully exploited due to lack of road. Shitake mushroom introduced about three years ago is getting wide acceptance from the public as a viable cash crop. Recently, straw mushroom was introduced with quite favorable response from the people. Epiculture will also be tried during the plan period. In order to improve the management of horticulture and enhance production, the Dzongkhag shall conduct farmers training, conduct demonstration and trials and supply improved seeds and seedlings. The Dzongkhag shall also assist in marketing the cash crops.

c) Renovation of existing irrigation channels

The irrigation channel at Rongchupang which benefits 16 households, covering 10.80 acres, is around two KM long. The channel shall be renovated with concreting to reduce water loss through seepage during the Ninth Plan.

d) Construction of Farm Road

8.3 KM long farm road construction from Chorten Kora to Bumdeling (Dungzam) has been proposed through SEZAP. This road will directly benefit 243 households of Bumdeling along the right bank of Kholongchu. The Gewog's immense potato production potential can be exploited once the road is constructed. However, a bailey bridge is a must over Tsarzam which is expected to cost 12.000 million.

The people of Womanang on the left bank of Kholongchu have also requested for a farm road from Bayling High School road to Womanang through Sep (Yangtse Gewog) which is approximately six kilometers long and can benefit 150 households.

e) Farm machinery

Farmers have requested for supply of three tractors, five power tillers, three flourmills and one potato chip making machine. BDFC shall make the credit available, if required by the intending farmers.

f) River bank Protection

The flat land at Bumdeling Dungzam is being inundated by Kholongchu and Nagpolachu every monsoon. If unchecked, the fertile river banks are likely to be washed away completely within a few decades. The people's representatives had raised this issue during the Eight Plan MTR meeting at Trashiyangste and the Dzongkhag was instructed to include it in the Ninth Plan proposal.

g) Farmers Study Tour

Progressive farmers of the Gewog shall be taken for study tour within and outside the Dzongkhag to observe successful farm-based projects and share experiences with other farmers.

Livestock Programs

a) General activities under the RNR Sector

Under Agriculture and Livestock Sector the extension agents posted in the fields shall continue to learn about new seed varieties, new cultivation technologies and farming practices which shall be passed on to the farmers through demonstration, promotion program, and exhibitions. The farming inputs such as improved seeds, fertilizers, pesticides, tools and farming machinery shall continue to be supplied on payment through the commission agents. The breeding animals shall be made available on full payment or subsidy (as may be decided by the Government) to farmers. The cost of transportation of breeding animals till the nearest road point shall be borne by the government through the concerned sector.

The RNR Sector shall continue to provide training to progressive farmers in farming technologies, pest management, livestock (backyard units) rearing and take them to in-country study tour to show the examples of successful farming and livestock rearing ventures. The treatment of sick animals and providing preventive medication/vaccination will continue to be provided as in the past.

The Bhutan Development Finance Corporation (BDFC), through its outlet in the Dzongkhag, shall continue to make credit available for all farming related credit needs of the farmers.

Forestry Programs

a) Creation of Private Forestry

Most people do not have surplus registered land to create private forestry. About a dozen farmers are interested in private forestry. Dzongkhag Forestry officers shall help prospective farmers to survey and layout plantation of private forest. At least 13,600 seedlings of appropriate species shall be raised and supplied to the farmers through the budget to cover 20 acres.

Education Programs

a) Establishment of new Community Schools

Three new community schools have been proposed at Tshaling, Dunglimang, and Mentshang to bring the educational facilities closer to the community for better coverage and to meet Universal Primary Education (UPE) by 2007. The schools will benefit a total of 166 households in the Gewogs.

b) Infrastructure development at Tarphe and Womanang Primary School

Tarphe and Womanang Primary Schools shall be expanded and consolidated to provide primary education from PP-VI in the Gewog. Construction of additional classrooms, playgrounds, multipurpose hall, and compound fencing shall be taken up in the Ninth Plan.

Health Programs

a) Renovation of Out Reach Clinic (ORC) sheds

The Out Reach Clinic sheds of Tarphe and Womanang shall be renovated by the concerned beneficiary/communities.

b) Construction of new Rural Water Supply Scheme (RWSS)

Since most villages of the gewog have no access to safe drinking water supply, 21 new RWSS are proposed during the Ninth Plan.

c) Rehabilitation of RWSS

Four existing RWSS at Gangkhardung, Tsaling, Ngaling and Tsaling Dagsa shall be rehabilitated during the Ninth Plan.

Suspension Bridge and Mule Track Programs

a) Construction of Suspension Bridge

Two new suspension bridges are proposed at Lhazam in Womanang and Tarpheh. The beneficiaries shall contribute unskilled labour while technical supervision and the Dzongkhag Engineering Services shall provide materials.

b) Steel deck for suspension bridges

It is proposed to replace wooden deck of Pengdizam with steel deck to reduce recurrent cost in the future.

c) Renovation of Mule Tracks

About 30 Km of the existing mule track is proposed for improvement through realigning, broadening and straightening the curves for user comfort.

Gewog Administration Programs

a) Strengthening of Gup's Office

Gup's Office, which was constructed under the GDFFA fund, lack furniture and equipment and is being proposed to supply during the Ninth Plan.

b) Renovation of Lhakhangs

Two Lhakhangs, namely Zhapang and Pengdi, have been earmarked for renovation during the plan period which will entail changing of all wooden building materials, roofing sheets and walls and compound improvement. The materials and skilled labor shall be borne from the government budget and the beneficiaries shall contribute unskilled labor.

4 Budget Estimate

Nu. in million

Sl. #	Activities	Unit	Target	Budget			Remarks
				Rec.	Cap.	Total	
1	Crop Improvement Program						
A	Wheat Development Activities:						
a	Farmers Training	HH	148	0.000	0.015	0.015	
b	Supply of Improved seed	Kg.	0	0.000	0.000	0.000	
c	Demonstration & Field Days	No.	5	0.000	0.050	0.050	
d	On-Farm-Trial	No.	3	0.000	0.012	0.012	
	Sub-total			0.000	0.077	0.077	
B	Mustard Improvement Activities:						
a	Supply of Improved Seed	Kg.		0.000	0.000	0.000	
b	Farmers Training	HH	101	0.000	0.010	0.010	
c	Demonstration & Field Days	No.	7	0.000	0.070	0.070	
d	On-Farm-Trial	No.	4	0.000	0.016	0.016	
	Sub-total			0.000	0.096	0.096	
2	Horticulture Development						
A	Walnut Development Activities:						
a	Farmers Training	HH	71	0.000	0.007	0.007	
b	Demonstration & Field Days	No.	3	0.000	0.030	0.030	
c	Supply of Seedling	No.		0.000	0.000	0.000	
	Sub-total			0.000	0.037	0.037	
B	Apple Development Activities:						
a	Farmers Training	HH	99	0.000	0.010	0.010	
b	Demonstration & Field Days	No.	10	0.000	0.100	0.100	
c	On-Farm-Trial	No.	5	0.000	0.020	0.020	
d	Supply of Seedlings	No.		0.000	0.000	0.000	
	Sub-total			0.000	0.130	0.130	
3	Asparagus Dev. Activities:						
a	Farmers Training	HH	68	0.000	0.007	0.007	
b	Supply of Seedling			0.000	0.000	0.000	
c	Demonstration & Field Days			0.000	0.060	0.060	
	Sub-total			0.000	0.067	0.067	
4	Potato Dev. Activities:						
a	Farmers Training	HH	240	0.000	0.024	0.024	
b	Supply of Seedling			0.000	0.000	0.000	
c	Demonstration & Field Days			0.000	0.110	0.110	
d	On-farm-Trials	No.	8	0.000	0.032	0.032	
	Sub-total			0.000	0.166	0.166	

5	Mushroom Dev. Activities:						
a	Farmers Training	HH	40	0.000	0.004	0.004	
b	Supply of Seedling			0.000	0.000	0.000	
c	Demonstration & Field Days		4	0.000	0.020	0.020	
	Sub-total			0.000	0.024	0.024	
6	Apiculture Dev. Activities:						
a	Farmers Training	HH	10	0.000	0.001	0.001	
	Sub-total			0.000	0.001	0.001	
7	Kitchen Garden Activities:						
a	Farmers Training	HH	94	0.000	0.010	0.010	
b	Supply of Seeds	Pkts.		0.000	0.000	0.000	
c	Demonstration & Field Days	No.	7	0.000	0.070	0.070	
	Sub-total			0.000	0.080	0.080	
8	Marketing Activity:						
a	Construction of Potato Store	No.	1	0.000	0.400	0.400	
	Sub-total			0.000	0.400	0.400	
9	Farmers Study Tour on Agriculture:						
a	Tour within the Dzongkhag	HH	216	0.000	0.022	0.022	
c	Tour to other Dzongkhags	HH	40	0.000	0.060	0.060	
	Sub-total			0.000	0.082	0.082	
10	Irrigation Development Program:						
a	Renovation of old Irrigation Channel	Km	2	0.000	0.300	0.300	
	Sub-total			0.000	0.300	0.300	
11	River Bank Protection Works	Km	2	0.000	1.169	1.169	
	Sub-total			0.000	1.169	1.169	
12	Farm Road Development:						
a	Construction of Farm Roads	Km	6	0.000	4.625	4.625	
b	Baily Bridge over Tszarzam	No.	1	0.000	12.000	12.000	
	Sub-total			0.000	16.625	16.625	
	Agriculture Total			0.000	19.254	19.254	
13	Livestock Breed Improvement Activities:						
a	Supply of Mithun Bulls	No.	1	0.000	0.011	0.011	Gangkhardung
b	Supply of Jersey Bulls	No.	1	0.000	0.012	0.012	Womanang
c	Supply of Donkey	No.	1	0.000	0.018	0.018	Lamthanhwog
d	Supply of Brown Swiss Bulls	No.	1	0.000	0.030	0.030	Tarphel & Longkhar
e	Supply of Yak Bulls	No.	1	0.000	0.040	0.040	Shingphel
	Sub-total			0.000	0.111	0.111	

14	Animal Health Program:						
a	Vaccination, Deworming, clinical cases, sterilization, etc.			0.000	0.150	0.150	
	Sub-total			0.000	0.150	0.150	
15	Farmers Study Tour	No.		0.000	0.140	0.140	
	Sub-total			0.000	0.140	0.140	
16	Farmers Training	No.		0.000	0.204	0.204	Training on Poultry, Piggery & Dairy Management.
	Sub-total			0.000	0.204	0.204	
17	Pasture & Fodder Dev.						
a	Pasture & Fodder Development	Acre		0.000	0.006	0.006	
	Sub-total			0.000	0.006	0.006	
	Livestock Total			0.000	0.611	0.611	
18	Private Forestry Activities:						
a	Supply of Seedling	No.	13,600	0.000	0.010	0.010	
b	Survey of Potential Areas			0.000	0.000	0.000	
	Sub-total			0.000	0.010	0.010	
	Forestry Total			0.000	0.010	0.010	
19	Construction of Tshaling new Community School:						
a	Academic Block	No.	1	0.000	0.300	0.300	
b	Two-Unit Teachers Quarter	Unit	2	0.000	0.200	0.200	
c	Water Supply	No.	1	0.000	0.100	0.100	
d	Furniture & Office Equipment			0.000	0.080	0.080	
e	Purchase of Library			0.000	0.200	0.200	
f	Library & Store Room	No.	1	0.000	0.200	0.200	
	Sub-total			0.000	1.080	1.080	
20	Construction of Mentsheng new Community School:						
a	Academic Block	No.	1	0.000	0.300	0.300	
b	Construction of Staff Qtr.	Unit	2	0.000	0.200	0.200	
c	Furniture & Office Equipment			0.000	0.080	0.080	
d	Water Supply			0.000	0.100	0.100	
e	Purchase of Library			0.000	0.200	0.200	
f	Library & Store Room	No.	1	0.000	0.200	0.200	
	Sub-total			0.000	1.080	1.080	
21	Construction of Dunglimang new Community School:						
a	Academic Block	No.	1	0.000	0.300	0.300	Community.
b	Furniture & Office Equipment			0.000	0.080	0.080	

c	Teacher's Quarter	Unit	2	0.000	0.200	0.200	
d	Purchase of Library			0.000	0.200	0.200	
e	Water Supply	No.	1	0.000	0.100	0.100	
f	Library & Store Room	No.	1	0.000	0.200	0.200	
	Sub-total			0.000	1.080	1.080	
22	Consolidation of Tarpheh Community School						
a	Purchase of Library Books			0.000	0.200	0.200	
b	Library & Store room	No.	1	0.000	0.200	0.200	
	Sub-total			0.000	0.400	0.400	
23	Consolidation of Womanang Community School						
a	Purchase of Library Books			0.000	0.200	0.200	
b	Library & Store room	No.	1	0.000	0.200	0.200	
	Sub-total			0.000	0.400	0.400	
	Education Total			0.000	4.040	4.040	
24	Rural Water Supply Program:						
a	Constn. of new RWSS	No.	21	0.000	2.772	2.772	
b	Rehabilitation of RWSS	No.	4	0.000	0.488	0.488	
	Health Total			0.000	3.260	3.260	
25	Suspension Bridge Program:						
a	Construction of new bridges	No.	2	0.000	1.910	1.910	
b	Maintenance of bridges	No.	1	0.000	0.382	0.382	
	Sub-total			0.000	2.292	2.292	
26	Mule Track Program:						
a	Maintenance of Mule Track	Km	30	0.000	0.150	0.150	
	Sub-total			0.000	0.150	0.150	
	Suspension Bridges & Mule Track Total			0.000	2.442	2.442	
27	Geog Administration Program:						
a	Office Equipment			0.000	0.030	0.030	
b	Office Stationery			0.050	0.000	0.050	
c	Furniture			0.000	0.100	0.100	
d	Renovation of Lhakhangs	No.		0.000	1.000	1.000	
e	GYT Expenses			0.050	0.000	0.050	
F	Establishment Cost			0.270	0.000	0.270	
	Geog Adm. Total			0.370	1.130	1.500	
	Geog Grand Total			0.370	30.747	31.117	

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.