

HUNGREL GEWOG

NINTH PLAN

[2002-2007]



PARO DZONGKHAG
ROYAL GOVERNMENT OF BHUTAN

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1. Current Situation

Hungrel is the smallest gewog in Paro Dzongkhag. It has an area of 3.6 sq. km with elevation ranging from 2,300 meters to 2,500 meters above sea level. There are 247 households living in its 17 villages in scattered settlements dotted with sacred Lhakhangs and Chortens.

Dry land cultivation is the main agricultural land use followed by wetland cultivation. The main crops grown are paddy and wheat. Potatoes and apples are the main cash crops grown. Local cattle dominate livestock population and production of dairy products is still mostly at the subsistence level.

The dzongkhag administration is located in Hungrel. Education is provided by a Junior High school and Primary school while health services delivered by the dzongkhag hospital in Wangchang Gewog. Most of the households have electricity as well as telephone connections. About 91% of the households have piped drinking water facility. The highway as well as other internal road network provide limited motorable road access.

2. Summary of Gewog Plan Outlay

In Nu. Millions					
Sl. No.	Programme	Current	Capital	Total	Remarks
1	Agriculture	0.000	7.529	7.529	
2	Livestock	0.000	1.203	1.203	
3	Forestry	0.000	0.388	0.388	
4	Education	0.000	0.900	0.900	
5	Health	0.000	1.492	1.492	
6	Suspension bridges/Mule Tracks	0.000	2.560	2.560	
7	Gewog Administration	0.885	2.440	3.325	
	Total	0.885	16.512	17.397	

3. Gewog Development Programs

Agriculture Programs

Crop Improvement Activities

Under this program, the farmers have identified the need for increase in production of paddy, wheat, and mustard to increase food security and reduce the import of oil. To this effect, the following activities will be undertaken during the Ninth Plan:

- Farmers training
- Demonstration
- Field day
- On farm trail and
- Supply of improved & high yielding seeds

Cash Crop Improvement Activities

Under this program, a number of horticulture crops are identified as the prioritized crops based on the potentials for each of the crops. Hence, the yield and quality of apple, asparagus, strawberry, mushroom, potatoes, vegetables and medicinal plants will be improved.

The objectives of these activities are to improve apple management, promote asparagus, strawberry, mushroom, potatoes and vegetable cultivation, and to introduce medicinal plant cultivation.

To achieve the objectives, the following activities will be taken up:

- Farmers training in crop management
- Post-harvest and marketing support,
- Demonstration of new varieties,
- On-farm trial and
- Supply of improved seeds

Rural livelihood support program

Under this program, the farmers have identified a number of rural livelihood support activities such as construction and renovation of irrigation channels, farm road construction, riverbank protection and farm mechanization.

The objectives of these activities are to improve irrigation facilities and road access to remote villages, to protect arable land and to encourage farm mechanization and reduce problems related to farm labor shortages.

The following sub-programs will be taken up to achieve the objectives stated above:

- Renovation of 7.5 Km irrigation channel to benefit 37 households and irrigate a catchment area of 80 acres.
- Construction of five Km irrigation channel to benefit 13 households and irrigate a command area of 29 acres
- Construction of four km farm road to benefit about 21 households
- Undertake two Kms of river training works
- Supply of available agricultural machinery depending on the need and demand of the people

Farmers Study Tour

Under this program, study tours for farmers have been requested for institutional and capacity development. Selected farmers will be taken on study tours within and outside the dzongkhag to enable the farmers to share experiences and inculcate learning by seeing.

Livestock Programs

Breed and pasture Improvement

Farmers have expressed interest to improve livestock breed and proposed for the supply of two Pure Jersey bulls, two Mithun bulls, a Yak bull and two Stallions. 200 pullets and 50 piglets will also be supplied along with the provision of 1000 AI.

To complement breed improvement activities in the gewog, the communities have also requested for support in pasture development activities. Accordingly, 110 kgs of pasture seeds will be distributed to farmers for 10 acres of pasture development and 140 kgs of oat seeds for four acres to reduce winter fodder shortages.

Establishment of Small-Scale Backyard Units

To improve livestock breed as well provide them with additional sources of incomes, the farmers will be encouraged to establish small- scale back yard farms. During the Ninth Plan the establishment of poultry back yard units for 43 households with 600 pullets and 13 piggery farms with 27 piglets have been proposed.

Assistance will be provided by the Dzongkhag to acquire loan through BDFC or other financial institutions.

Farmers Training and Study Tour

Under the program a total of 557 farmers will be trained in different Livestock Management System with an objective to enhance skills and knowledge of the farmers on improved Livestock management. In addition 250 selected farmers will be taken for study tour, for period of 10 days to different farms and Dzongkhag, which will boost the knowledge through practical observation and information shared by experienced farmers.

Farmers in the gewog have also shown interest to form a Milk Cooperative Society within the Plan period.

Forestry Programs

Forest Fire Management

Forest fire protection is an important gewog program to prevent forest from fire damages. To have effective forest fire control, the gewog has asked for supply of basic fire fighting equipment and the demarcation of fire lines to prevent forest fire outbreaks.

Farmers Training

To create awareness on forest and nature conservation act, the following activities will be taken up:

- Farmers training on Private Forestry establishment
- Farmers training on Community Forestry establishment and management
- Dissemination of rules, formalities and procedures on rural house building timber
- Farmers training on Forest fire management

Farmers Study Tour

Selected farmers will be taken on study tours to the other Dzongkhags to enhance farmers' knowledge on all related subjects and to share experiences amongst the farmers from the others Dzongkhags.

Community Forestry

The aim of community forestry is to hand over the government-reserved forest to the local community to manage on their own so as to reduce the pressure on the government reserve forest. The other objective is also to involve the community to participate in sustainable forest management and educate them about nature conservation.

The Forestry Sector would establish three hectares community forestry in the gewog on pilot basis since the approach of community forestry is still new to the people.

Private Forestry

The main objective of the private forestry is to promote tree planting in private registered land to meet or overcome the shortage of forest produces such as firewood, timber for house construction, etc.

Under this program, five hectares of private land will be registered as private forest, which will benefit 34 households. The Government will distribute the seedlings to the farmers.

Education Programs

Strengthening of Tshaluna Community Primary School

Tshaluna Community Primary School is located in a remote part of the gewog. The school does not have basic facilities. Hence the following activities are proposed for the school. Construction of three-classroom block, administrative block and staff quarters, and the procurement of furniture and office equipment will be taken up during the Ninth Plan.

Establishment of Non-Formal Education Centres

To achieve 100% Adult literacy and enable all adults to read and write Dzongkha, two NFE centres will be established at Paro Junior High School and Tshaluna Community Primary School. This program will benefit 60 households.

Health Programs

Construction of New ORC shed

The ORC service at present is being rendered in one of the village health worker's house. The provision of quality maternal and child health care being very important, it is necessary to construct one ORC at Bolchapsa. This will benefit the community of Jishigang, Tadzong and Hungrel village.

The community will provide labor for the construction work while payment of skilled labour and hardware materials are requested from the government.

Construction of latrines

Out of 128 households 87% of them have proper different types of latrine under use. Every household will be encouraged to improve the sanitation further and to have proper latrines in each house.

Construction of Garbage pits

About 83% of the houses have proper pits for disposal of waste. The waste in every house is commercially used plastic and bottle containers, which are totally non-degradable. Therefore, to prevent garbage related health risk, all the households will be encouraged to dig individual garbage pit for degradable and non-degradable wastes.

Construction of proper footpath

To maintain the sanitation and hygiene in better condition, all the households will be encouraged to build the footpath with soling and to repair the old ones. Only 43% of the households have footpath maintained properly.

Construction of separate animal sheds

About 21% of the households have separate animals shed constructed and maintained. As in the past more emphasize will be given to rest of the houses to separate the animals away from the house to improve the sanitation and hygiene. The issues were raised that there is problem with the timber and land to construct the animals shed away from the houses.

Rural water supply schemes (RWSS)

About 91% of the houses have access to rural water supply in the gewog. Four new schemes and rehabilitation of seven schemes are proposed for the Ninth Plan.

Rural water supply schemes

No.	Villages/Places	No. of HH Beneficiaries
a.	New Schemes	
	Gensakha Lakhang	1
	Longchuna	7
	Tsheluna Pr. School	7
	Lateylakha Lakhang	1
b.	Rehabilitation	
	Drugyelling	11
	Tshokhorjakha & Hungrel	13
	Chujakha	15
	Gidawom	18
	Chimithangkha	11
	Tsheluna	13
	Paro Jr. High School	10

Suspension Bridge and Mule track Programs

Villages of Tshaluna and Gidawom are quite remote and not much development has taken place. Feeder road constructions have been proposed which will be implemented and budgeted with the central roads department if found feasible.

Construction of suspension bridge

In order to provide access route for the mobility of farmers and transportation of their agricultural, horticultural and livestock produce, it is felt necessary to construct a suspension bridge at Penjorling Tshekhha. This bridge will immensely benefit the farmers.

The cost of bridge parts, cement, royalty of timber and skilled labour wages have been requested from the government while the beneficiaries will provide free labour for the construction.

Maintenance of wooden bridges

Due to the wet monsoons and frequent use by farmers, cattle and pack ponies, the wooden bridges need timely maintenance to ensure the safety of users. The following 10 wooden bridges are proposed for repair works during the Ninth Plan: - Gidakom, Chingka zam, Churalum, tashidingkha, Rabdazam, Jangsa zam, Zamtozam, Sechey zam, Zampawongma and Ney zam.

The cost of bridge parts, cement, royalty of timber and skilled labour wages have been requested from the government while the beneficiaries will provide free labour for the construction.

Maintenance of Mule Track

The only means of communication for those who live in the remote villages is the mule track. However, the mule track in Tshaluna village and chang-Lateykha are narrow and steep making it very dangerous and unsafe for users. The farmers have proposed that maintenance works on these mule tracks be carried out during the Ninth Plan.

Gewog Administration and Management Programs

Maintenance of Lhakhangs

The gewog has important Lhakhangs and Chortens dotting the villages, viz, Lateykha Lhakhang, Chimethangkha Lhakhang, Jangsarphu Lhakhang, Tshajunae, Zuri Dzong, Goensakha, Kotithangkha, etc.

In order to preserve and promote the rich religious and cultural heritage of the Kingdom, it is important to maintain the Lhakhangs and chortens at all costs. Many Lhakhangs need minor as well as major renovation, e.g. CGI sheet roofing, electrification, traditional painting, replacement of rotten timber parts, etc. However, based on the actual budget allocation and the technical competence of the Dzongkhag engineering staff, only 3 to 4 Lhakhangs will be renovated during the plan period. If there is budget balance, renovation of a few more Lhakhangs will also be taken up.

Construction of Gups Office and DYT Hall

The Gup does not have office at present. GYT and village level meetings are held in open air or in village homes. Since the Gup and the GYT's role and functions will increase manifold from the Ninth Plan, the public feels that a proper Gup's office will be necessary. Therefore, construction of Gup's office is being proposed as a priority program for the gewog.

Labor for construction works will be provided by the communities while GI sheets and payment for skilled carpenter and mason are requested from the government.

4. Budget Estimates

In. Nu. Million

Sl. No.	Program/Activity	Target	Budget			Remarks
			Rec.	Capital	Total	
I	Agriculture Programs					
a	Cereal crop improvement					
1	Rice improvement					Costs borne by dzongkhag
-	Farmers training	47 HH		0.015	0.015	
-	Demonstration	3 Nos.		0.018	0.018	
-	Field day	3 Nos.		0.015	0.015	
-	On-farm trials	3 Nos.		0.012	0.012	
-	Supply of seeds		-	-		Supply based on demand
2	Wheat Improvement					Costs borne by dzongkhag
-	Farmers training	45 HH		0.014	0.014	
-	Demonstration	3 Nos.		0.018	0.018	
-	Field day	3 Nos.		0.015	0.015	
-	On-farm trials	3 Nos.		0.015	0.015	
-	Supply of seeds		-	-		Supply based on demand
3	Maize Improvement					Costs borne by dzongkhag
-	On-farm trials	3 Nos.		0.018	0.018	
-	Field day	3 Nos.		0.015	0.015	
-	Supply of seeds		-	-		Supply based on demand
4	Mustard Improvement					Costs borne by dzongkhag
-	Farmers training	35 HH		0.016	0.016	
-	Demonstration	3 Nos.		0.018	0.018	
-	Field day	3 Nos.		0.015	0.015	
-	On-farm trials	3 Nos.		0.015	0.015	
-	Supply of seeds	50 Kgs	-	-		Supply based on demand
	Sub-total		0.000	0.219	0.219	

b	Horticulture crops					Costs borne by dzongkhag
1	Apple improvement					
-	Farmers training	55 HH		0.017	0.017	
-	Demonstration	2 Nos.		0.010	0.010	
-	Field day	2 Nos.		0.010	0.010	
-	Supply of seeds		-	-		Supply based on demand
2	Asparagus improvement					Costs borne by dzongkhag
-	Farmers training	50 HH		0.015	0.015	
-	Demonstration	3 Nos.		0.030	0.030	
-	Field day	3 Nos.		0.015	0.015	
-	Supply of seeds	50000 Nos	-	-		Supply based on demand
3	Strawberry Cultivation					Costs borne by dzongkhag
-	Farmers training	40 HH		0.015	0.015	
-	Demonstration	3 Nos.		0.030	0.030	
-	Field day	3 Nos.		0.015	0.015	
-	Supply of seeds		-	-		Supply based on demand
4	Mushroom improvement					Costs borne by dzongkhag
-	Farmers training	30 HH		0.009	0.009	
-	Demonstration	2 Nos.		0.010	0.010	
-	Field day	2 Nos.		0.010	0.010	
-	Supply of seeds		-	-		Supply based on demand
5	Potato improvement					Costs borne by dzongkhag
-	Farmers training	25 HH		0.008	0.008	
-	Demonstration	2 Nos.		0.010	0.010	
-	Field day	2 Nos.	-	0.010	0.010	
-	Supply of seeds		-	-		Supply based on demand
6	Medicinal plants					Costs borne by dzongkhag
-	Demonstration	2 Nos.		0.010	0.010	
-	Field day	2 Nos.		0.010	0.010	
7	Vegetable improvement					Costs borne by dzongkhag
-	Farmers training	45 HH		0.014	0.014	
-	Demonstration	2 Nos.		0.014	0.014	
-	Field day	2 Nos.		0.010	0.010	
-	Supply of seeds		-	-		Supply based on demand
	Sub-Total		0.000	0.272	0.272	

c	Irrigation & farm road					
-	Const. Irrigation channel	5 Kms	-	1.250	1.250	Machines provided at kidu rates and
-	Renovation of Irrigation Channel	7.5 Kms	-	1.125	1.125	labor contribution by beneficiaries.
-	Farm Road Construction	4 Kms	-	4.000	4.000	
	Sub-Total		0.000	6.375	6.375	
d	Farm mechanization					
-	Power tillers	12 Nos.				Supply will depend on availability .
-	Transplanter	1 Nos.				Costs borne by farmers
-	18 HP Tractor	4 Nos.				
-	Power Thresher	2 Nos.				
	Sub-total		0.000	0.000	0.000	
e	River bank Protection					
-	River training works	2 Kms		0.600	0.600	Machines from Gov't. Labor by beneficiaries
	Sub-total		0.000	0.600	0.600	
f	Farmers study tours					
-	Tours within the dzongkhag	60 HH		0.018	0.018	Costs borne by the dzongkhags
-	Tours to other dzongkhags	30 HH		0.045	0.045	
	Sub-total		0.000	0.063	0.063	
	Total for Agriculture		0.000	7.529	7.529	
II	Livestock programs					
1	Breed Improvement					
-	A.I crates	1000 Nos	-	-	0.000	Full costs
-	Supply of Pure Jersey Bulls	2 Nos.	-	0.024	0.024	
-	Supply of Mithun Bulls	2 Nos.	-	-	0.000	
-	Half-Linger stallion	2 Nos.	-	0.024	0.024	
-	Supply yak bulls	1 Nos.	-	0.012		
-	Supply of pullets	200 Nos.	-	-	0.000	Full costs
-	Supply of piglets	50 Nos.	-			Full cost
-	Animal health services		-	0.450	0.450	Costs borne by dzongkhag
	Sub-Total		0.000	0.510	0.510	
2	Farmers Training					
-	Poultry	150 HH	-	0.090	0.090	Costs borne by the dzongkhag
-	Piggery	100 HH	-	0.060	0.060	“do”
-	Dairy	200 HH	-	0.120	0.120	“do”
-	Pasture management	100 HH	-	0.060	0.060	Full cost by farmers
-	Formation of MCS	1 Nos.				Full cost by farmers
-	GID control	7 HH	-	0.005	0.005	

-	Study tours to other dzongkhags	250 HH		0.300	0.300	Costs borne by the dzongkhag
	Sub-Total		0.000	0.635	0.635	
3	Feed & Fodder Develop'					
-	Supply of Pasture Seeds	110 kgs	-	0.055	0.055	10 acres
-	Supply of Oat Seeds	140 kgs	-	0.003	0.003	4 acres
	Sub-Total		0.000	0.058	0.058	
4	Estab. Of backyard farms					Full costs borne by farmers
-	Poultry (43 HH)	600 Nos.				
-	Piggery (13 HH)	27 Nos.				
	Sub-Total		0.000	0.000	0.000	
	Total for Livestock		0.000	1.203	1.203	
III	Forestry					
1	Community Forestry (materials/stationary for mangnmt. Plans)		-	-	0.000	Recurrent expenses with the dzongkhag
2	Private Forestry	5 HH	-	-	0.000	
-	Distribution of seedlings	13000 nos	-	0.078	0.078	
-	Printing of ownership certificates		-	-	0.000	Recurrent expenses with the dzongkhag
3	Fire management & control					
-	Purchase of fire equipment	1 set		0.070	0.070	
-	Demarkation of fire line		-			Recurrent expenses with the dzongkhag
-	Light refreshments		-			
4	Farmers Training					
-	Private Forestry	20 Nos.		0.030	0.030	
-	Community forestry	20 Nos.		0.030	0.030	
-	Pvt. Nursery raising	20 Nos.		0.030	0.030	
-	Forest fire management	20 Nos.		0.030	0.030	
-	Environmental awareness	20 Nos.		0.030	0.030	
6	Farmers tour to other dzongkhags	6 Nos.		0.090	0.090	
	Total for Forestry		0.000	0.388	0.388	
IV	Education					Establishment & other recurrent costs with the dzongkhag
1	Estab. of NFE centres	2 Nos.	-	-	0.000	
2	Tshaluna CPS					
-	Materials for building			0.500	0.500	
-	Supply of furniture			0.200	0.200	
-	Supply of office equipment			0.200	0.200	
	Total Education		0.000	0.900	0.900	

V	Health					
1	Construction of ORC	1 No.	-	0.110	0.110	At Bolchapsa. Only technical guidance provided by the dzongkhag
2	Construction of Latrines		-	-	0.000	
3	Const.of Garbage pits		-	-	0.000	
4	Const. of Proper Foot Path		-	-	0.000	
5	Const.of Separate Shed		-	-	0.000	
6	RWSS					
-	New Schemes	4 Nos.	-	0.528	0.528	
-	Rehabilitation	7 Nos.	-	0.854	0.854	
	Total Health		0.000	1.492	1.492	
VI	Suspension bridges					
1	Const. of new bridges	1 Nos.	-	2.000	2.000	
2	Improvement of bridges	10 Nos.	-	0.500	0.500	
3	Maintenance of mule tracks	6 kms	-	0.060	0.060	
	Total bridges & Mule track		0.000	2.560	2.560	
VII	Gewog Administration					
1	Const. of Gup's Office	1 No.	0.000	0.850	0.850	Typewriters
2	Purchase of furniture		0.000	0.050	0.050	
3	Purchase of office equipment		0.000	0.020	0.020	
4	Installation of telephone		0.000	0.020	0.020	
5	Office stationary		0.015	0.000	0.015	
6	Gups & assistant's salary		0.300	0.000	0.300	
7	Maintenance of Lhakhangs	3 Nos.	0.000	1.500	1.500	
	Total Gewog Admn.		0.885	2.440	3.325	
	Grand Total		0.885	16.512	17.397	

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.