

ROYAL GOVERNMENT OF BHUTAN



Guidelines
on
Cost-Sharing Mechanism for the RNR Sector
Twelfth Five Year Plan

April 2019

MINISTRY OF AGRICULTURE AND FORESTS

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1. BACKGROUND

The word subsidy, derived from the Latin word *subsidiium* means "support, assistance, aid, help, and protection". It is a measure that keeps the price for consumers below market level, or keeps prices of producers above market levels or that reduces costs for both producers and consumers by giving direct and indirect support (OECD). While World Trade Organization interprets it as a financial contribution by a government or any public body or any form of income or price support whereby a benefit is thereby conferred. In USA and France, subsidies have been designed primarily to increase farm income, either by raising level of prices above free market levels or by providing direct payments to farmers.

Subsidy within the RNR sector is defined as a separate and additional governments support either in kind or cash payments or both to producers and value chain intermediaries for the purpose of enhancing RNR goals and objectives such as increased food production, guaranteeing farmers' basic incomes and strengthening the RNR sector's contribution to the national economy.

MoAF starting the 12 FYP is going to implement this Cost sharing mechanism (CSM) in place of the subsidy component. CSM is a process by which the actors involved in the production/processing/marketing share the costs involved. As a government entity MoAF has worked out various different cost sharing mechanisms for the three sectors (Agriculture, Livestock and Forests) depending on the type of products/services and the type of cost-function. Cost sharing components are concentrated to specified subsector interventions complementing regular development plans and programs of the RNR.

One of the goals of cost sharing mechanism is to share the costs involved and this result in sharing the responsibilities too; therefore in a way this ensures the success of the activity implemented. The other goal is to divide the externality among the agents.

Historical evidences and evolution of subsidy under RNR Sector

Agriculture subsidies started as early as 1961 with the commencement of planned development as a necessary tool to promote development of agriculture and livestock farming. Farmers were provided with seeds and seedlings of improved varieties, improved breeds of livestock, fodder seeds, farm tools, plant protection chemicals, and fertilizers for increasing crop and livestock production. Later, the subsidies were gradually phased out. From the 8th FYP, the Government limited RNR subsidy to produce planting materials, improved livestock breeds and support transport cost of inputs. The Government continues to pay 10% commission of the sales value of inputs to the Sales & Service Representatives (Commission Agents) to facilitate distribution of agricultural inputs.

Until the end of 11th FYP, the subsidy from the Government was focused more towards the subsistence farming, which was aimed at poverty alleviation and securing household food and nutrition. The subsidy was provided mainly to the farmers groups and cooperatives and the enterprising individuals were not adequately supported.

2. RATIONALE, GOALS AND OBJECTIVES

Rationale

The primary factor responsible for rural poverty in Bhutan is the small size of land holding that is not big enough to support the family livelihood. The productivity of the farms is low because farmers are unable to purchase more productive inputs for increasing production and productivity of their farms.

The cost sharing mechanism on RNR inputs is therefore justified by the realities of rural poverty, and food and nutrition insecurity triggered by low farm productivity. For this reason, the Ministry of Agriculture and Forests (MoAF) considers its cost sharing mechanism on RNR inputs as direct production investment to increase crop and livestock production and productivity for the purpose of achieving food security and poverty alleviation.

The cost sharing mechanism proposed will provide financial support across the value chain; starting from production to marketing interventions. CSM will also provide various types of support packages depending on the type of activity level (subsistence, semi-commercial or commercial). This is required as the CSM needs to be looked at from the perspective of its importance on rural poverty alleviation, food and nutrition security and commercialization of farming activities.

With such focused interventions CSM is expected to contribute to the agriculture development objectives much more efficiently in the 12th FYP.

To enhance productivity through commercialization and attain greater self-sufficiency in RNR products during 12th FYP, the proposed cost sharing mechanism shall therefore provide clarity on the type, proportion and governance modalities for incentives to be provided for production, post-harvest, processing and marketing of RNR products.

This cost sharing mechanism aims to streamline the practice of providing financial support for consistency and uniformity. Further, the mechanism will map all existing subsidies by types, proportions and governance modalities illustrating issues and gaps in the existing subsidy packages and modalities and recommend interventions and changes required for efficient implementation (Annex 1).

Unlike previous plans, the 12th FYP strives to provide farming incentives with a structured and more focused approach. The justifications that call for the provision of farming incentives are further discussed below:

- The Food Act of Bhutan 2005 provides protection to human health through trade of food. Moreover, the Food and Nutritional Security Policy of Bhutan 2014 highlights the need to focus on food availability, access, utilization and stability.
- For an agrarian society with 56 % of the population still directly engaged in farming for livelihood and contributing to 16.5 % to the overall GDP, it is imperative to support farmers through farming incentives. Incentives to farmers will enhance production, stabilize price, expand export and contribute to import substitution and stabilize trade balance.

- The cultivated area in Bhutan is only 2.9 percent of the total geographic area. In order to meet the requirement of the growing population, food production needs to be enhanced. Thus, there is a need to incentivize farmers to enhance productivity. Incentivizing farming population will not only improve their livelihoods but would also contribute to the food need of the non-farming population residing in urban areas.
- There is high risk associated in farming due to wild animal depredation and natural calamities such as windstorm, hailstorm, erosion, pests and diseases including post-harvest losses. There are no proper compensation mechanisms to cushion farmers against such losses. Given the risk, farming has to be incentivized to keep our farmers in the business. Such losses shall be compensated through proposed Endowment Fund for Crop and Livestock Conservation or through CSM.

In view of the policy to achieve food and nutrition security, address farming constraints, encourage farmers to enhance food production through commercialization, generate employment and contribute to macro-economic stability, it is essential to incentivize farming. Incentives are social safety net contributing to national security. The farming incentives outlined in this document is therefore part of the 12th FYP strategy for RNR Sector development. Thus the rationale or the justifications for providing the CSM.

Goals and Objectives

The overall goal of providing cost sharing mechanism is to enhance and sustain RNR sector growth, generate income and employment. The guideline on CSM will therefore strive towards following objectives during the 12th FYP:

- To ensure access, uniformity and consistency on types of RNR subsidies for all Bhutanese farmers;
- To promote commercialization of farming and enterprise development for enhancing production and employment generation;
- To reduce vulnerability to food insecurity and poverty of subsistence and pro-poor (below poverty line) Bhutanese farmers’;
- To continuously increase and sustain growth in crop and livestock farming and improve livelihood of Bhutanese farmers and;
- To promote economic growth and create synergy between the farmers’ initiatives and the government effort for rural poverty alleviation.

Scope

The guideline shall be uniformly adopted and implemented by all departments, agencies, central programs, commodity programs and projects within the RNR sector in dispensing any form of agricultural (agriculture, livestock, forestry and RNR marketing) incentives.

1. COMMODITY PRIORITIZATION AND SECTOR-WISE CSM

Department of Agriculture

During 12th FYP, the Department of Agriculture (DoA) shall strive towards achieving greater self-sufficiency in agriculture. The subsidy package during 11th FYP was focused more to farmers groups and cooperatives to support subsistence farmers and priority programs such as vegetables and farm mechanization. The past subsidies were limited for individual enterprising farmers and private sector. In 12th FYP, DoA shall continue to enhance the domestic production and reduce import. Unlike the past subsidies, the incentives for 12th FYP shall cover small, semi and commercial farms (groups/individuals/private sector) with clear uniformity, type and governance modalities. This CSM is aimed to support and realize the broad objectives and strategies for different crop commodities and programme outlined in 12th FYP document.

The Department of Agriculture has identified 7 priority commodities for investment. The identified priority commodities are rice, maize, vegetables, potato, fruits & nuts, and citrus. Further, Organic farming is also identified as priority programme in line with the national vision to adopt 100% organic system and increasing demand for organic food globally. To enhance the production and profitability of prioritize commodities farmers would be supported to adopt/practice improved production technologies such as high yielding varieties, farm mechanization, product development and marketing.

The focused investment on priority commodities will help avoid dilution of resources and is expected to create a desired impact. However, incentive for development of other commodities will also be supported based on the availability of resources. The rationale for selection of commodity for priority investment is discussed in table 4 below.

The 7 priority commodities are selected considering their contribution and potential to address food and nutritional security, income generation through commercialization/export, potential to address poverty, environmental benefits, beneficiary coverage, employment generation, and import substitution.

Table 1: Rationale for selection of commodities for priority investment

SN.	Commodity	Rationale
1	Rice	Rice is the staple diet and the domestic production meets only half of the requirement. Rice production is labour intensive and the cost of production is high. There is potential to nearly double the current rice productivity from 1.6 MT per acre. The current policy on restriction on conversion of Chhuzhing to other forms of land use entails opportunity cost that has to be compensated in the form of incentives. The 12 th FYP target for rice self-sufficiency of 60 % is daunting and so incentives is needed to achieve the production target.

2	Maize	Maize is still a staple in the east and it has the potential to contribute to food self-sufficiency through product diversification and reducing the cost of product development. It has the potential to contribute to the cereal needs of the schools and other institutions.
3	Vegetables	These commodities have the potential for trade in the domestic as well as international market. It can help in import substitution and positively contribute to balance of trade for agricultural products. Additionally, these products will enhance the household nutritional security.
4	Potato	
5	Fruits & Nuts	
6	Citrus	
7	Organic	Given the natural farming condition, it is rational to invest in organic farming which has multiple social, economic and environmental benefits. Besides providing healthy food, Bhutan's agricultural commodities can only complete with the global market if it is organically grown. Bhutan has reputation of having natural environment, being carbon negative and being situated in the Himalayas. This potential will have to be tapped for export and trade. Currently, volume and consistent supply is an issue for trade of organic commodities. These constraints can be addressed with the provision of the incentives. Support for organic farming is essential for long term sustainability of agriculture for a fragile Himalayan country.

The beneficiaries are categorized into subsistence, semi-commercial and commercial based on following criteria:

- i. Subsistence: Farmers cultivating less than 1 acre land or investment size less than Nu. 0.100 million;
- ii. Semi-commercial: Farmers cultivating >1 acre to 3 acres land or investment size from Nu. 0.100 million to Nu. 0.500 million and;
- iii. Commercial: Farmers cultivating > 3 acres land or investment size of more than Nu. 0.500 million

Note: General under beneficiaries indicates all categories of farmers/beneficiaries (subsistence, semi-commercial and commercial).

Table 2: Commodity based proposed cost-sharing packages

VALUE CHAIN	TYPE OF SUBSIDY (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES	
			Subsistence	Semi-commercial	Commercial		
Priority commodity 1: Rice							
Value Chain	Production	Seeds	Increase SSR from 45 % to 60%, high cost of production, import substitution, low productivity, Labour constraint	100:0	100:0	100:0	Once in 5 years for each HH for improved varieties recommended by DoA.
		Pump Irrigation-electricity cost		90:10	90:10	90:10	LG should keep provision for payment of 90% of the bill amount. 10% should be beneficiaries' contribution. Pump irrigation system shall be built only when other means of irrigation is technically not feasible or un-economical.
	Marketing	Price gap between cost of production and final market price	To encourage further rice production to reduce import	100:0	100:0	100:0	Support to be extended only to growers cultivating varieties recommended by the Department of Agriculture
Priority commodity 2: Maize							
Value Chain	Production	Seeds	Increase SSR from 84 % to 92%, high seed cost (Hybrid), low productivity, Labour constraint,	100:0	70:30	70:30	Once in 5 years for each HH for improved varieties recommended by DoA.

	Marketing	Transportation support from farm to feed mill /distillery/market. Price difference between market price and cost of production	Huge cost of transport, difference in production cost and price offered by AWP/BCD/ Feed mills	80:20 80:20	80:20 80:20	80:20 80:20	(Minimum quantity to qualify for support should be one DCM truck load)
Priority commodity 3: Vegetables							
Value Chain	Production	Seeds		100:0	80:20	80:20	Maximum for 2 years per HH for crop/ varieties recommended/notified by DoA
	Marketing	Transport subsidy	To boost production and availability	50:50	50:50	50:50	- Minimum one Bolero load - For Youth groups and farmers' groups only - Only for winter vegetables (Harvested during Nov-March)
Priority commodity 4: Potato							
Value Chain	Production	Seed (replacement only)	12 th plan priority commodity, food security crop (sale of potato to buy ration, send children to school)	70:30	70:30	70:30	Once in 5 years for each HH only for improved varieties recommended by DoA.
	Marketing	Price gap between auction price and cost of production Cold storage charges for potato to	To encourage maintaining potato production on commercial scale	NA	NA	100:00 50:50	- Maximum for three years for each HH. - Applicable only when stored in private and SoEs owned cold stores

		be released during winter					
Priority commodity 5: Fruits and nuts							
Value Chain	Production	Seedlings	12 th plan priority commodity, certain crops needs re-plantation, emerging crops that have high value, domestic market	100:0	70:30	70:30	Once in 5 years for each HH for improved varieties recommended by DoA.
		Trellis		60:40	60:40	60:40	One time
	Marketing	Cold storage charges	To encourage storage and marketing to substitute import	0:100	0.100	25:75	<ul style="list-style-type: none"> - For apple and pears to be released during winter - Maximum for three years for each HH. - Applicable only when stored in private and SoEs owned cold stores
Priority commodity 6: Citrus							
Value Chain	Production	Seedlings- disease free	Dwindling industry due to greening, trade balance, low productivity. Food security crop (income used to buy food)	100:0	70:30	70:30	Once in 5 years for each HH for improved varieties recommended/notified by DoA.
	Marketing	Fibre board box packaging for export.	To reduce post-harvest loss and improve export market value	0:100	0100	100:0	<ul style="list-style-type: none"> - Maximum two seasons - Only price gap between fibre board box and commonly used wooden box

Priority commodity 7: Quinoa							
Value chain	Production	Seeds	New super food, high nutrient, diversity, export potential	100:0	70:30	70:30	Once in 5 years for each HH for improved varieties recommended/notified by DoA.
	Marketing	Price gap support between cost of production and final market price	New super food, high nutrient, diversity, export potential	100:0	100:0	100:0	
		Packaging support		NA	NA	50:50	For the first 2 years only for exporters
Priority commodity 8: Organic Agriculture							
Value chain	Production	Organic Seeds and seedlings		100:0	80:20	80:20	Once in 5 years for each HH for improved varieties recommended/notified by DoA.
Priority commodity 9: Mushroom							
Value chain	Production	Spawn production (lab equipment)	Nutrition, diversity, niche market, income generation	80:20	80:20	80:20	One time support
		Spawn supply		100:0	70:30	70:30	As required
		Production support (driller, injector, sterilization, straw chopper)		*	50:50	50:50	One time support for Semi commercial and commercial farmers. * For Subsistence farmers NMC will provide equipment for use on returnable basis
Priority commodity 10: Oilseeds							
V	Production	Seeds		100:0	100:0	100:0	Up to to three years

	Processing	Processing equipment	SSR is only 3%; import substitution, to enhance productivity	80:20	70:30	50:50	One time for each machine/equipment/HH based on the priority lists of machineries identified by the Department of Agriculture from time to time
	Marketing	Packaging support		80:20	60:40	50:50	Maximum for 2 seasons
Priority commodity 11: Pulses							
Value	Production	Seeds	Soil fertility, nutrition, diversity	100:0	100:0	100:0	Up to 3 years
Priority commodity 12: Medicinal and Aromatic Plants							
	Production	Seeds and Seedling	Conservation, Income generation	100:0	70:30	70:30	Seeds up to 3 years and seedling for one time
	Processing	Basic equipment		100:0	70:30	70:30	One time for each machine/equipment/HH based on the priority lists of machineries identified by the Department of Agriculture from time to time
Value	Marketing	Packaging and transportation		N.A	50:50	50:50	For the first 2 years only for exporters
Cross-cutting support services							
		Farm Machine hiring	Address labour constraint & drudgery, reduce cost of production;				As required - As per Farm Machineries Hiring guideline (Annexure 2) and hiring charge approved by pricing committee.

Farm Machineries (Sale)-	Address labour constraint & drudgery, reduce cost of production;	50:50	50:50	50:50	One time for each machine/equipment/HH based on the priority lists of machineries identified by the Department of Agriculture from time to time
Processing Machineries	Encourage product development/value addition	100:0	70:30	50:50	One time for each machine/equipment/HH based standard, type and number of essential equipment compiled and developed by the Department of Agriculture from time to time
Land development-fallow land revival, consolidation					As per agriculture land development guideline 2017. Priority will be given for revival of fallow agricultural land. Priority shall given to revival of fallow land
Efficient Irrigation technology (sprinkler, drip, water tank, pipes, reservoirs, water harvesting, etc) including water pumps (solar hydraulic etc)		100:0	80:20	80:20	One time
Establishment of Bio- fertilizer and bio- inputs production plant		80:20	50:50	50:50	One time Maximum ceiling Nu. 1.000 million per proponent for semi-commercial and commercial

Compost shed (compost, vermi-compost, bio-digester)		80:20	80:20	80:20	One time
Bio inputs (fertilizer, pesticides, bio pest control materials-traps etc)	Improve fertility, enhance yield, promote organic farming	100:0	100:0	100:0	- For Organic farmers in identified production area. - To be supported under proposed organic flag ship program.
Low cost poly tunnel and shade house (plastic and shed net)	Protected cultivation, saving time	100:0	100:0	100:0	One time maximum of 5 numbers
Poly house set (pre-fabricated)		80:20	80:20	80:20	One time maximum of 5 numbers
Post-harvest Infrastructures (e.g. cold stores; grading, processing & packaging house) for private sector	Increasing shelf life, higher returns, encourage private sector involvement	70:30	70:30	70:30	One time
Packaging machine and materials (e.g. crates, super grain bags, fibre box, etc.)		100:0	70:30	70:30	Maximum for 2 years for each beneficiary.
Electric Fencing materials	Reduce Human Wildlife Conflict, Encourage farming	60:40	60:40	60:40	As per existing guideline

Department of Livestock

During 12th FYP, the Department of Livestock (DoL) shall strive towards achieving greater self-sufficiency in livestock products. The subsidy package during 11th FYP was focused more to farmers groups and cooperatives to support subsistence livestock farming activities. The past subsidies did not provide room for supporting individual enterprising farmers. In 12th FYP, DoL shall continue to enhance the domestic production and reduce import of livestock products. Unlike the past subsidies, the incentives for 12th FYP shall cover micro, semi and commercial farms (groups/individuals/private sector) with clear uniformity, type and governance modalities.

The Department of Livestock has identified 6 commodities for investment. The identified commodities are dairy, piggery, poultry (egg & broiler), fishery (warm & cold water), goat and honey. Organic livestock farming is also identified as priority area in line with the national vision to adopt 100% organic production system and increasing demand for organic food globally.

Among seven identified commodities, dairy, egg and meat are three priority commodities. Prioritization of three commodities are based on their contribution and potential to address food and nutritional security, income generation through commercialization, potential to address poverty, environmental benefits, beneficiary coverage, employment generation, and import substitution.

Table 3: Rationale for selection of commodities for priority investment

Sl. #	Commodity	Rationale
1	Meat (Chicken, pork, Chevon, fresh fish)	Meat is most common food item and consumed almost daily by most of the population. There is ever increasing demand of meat in the country. Currently the self-sufficiency in meat is only 37% and there is huge import. The Department gives high priority on domestic production of meat and aims to achieve 47% by the end of 12 th FYP.
2	Dairy	Dairy is the most popular livestock enterprise in the country and economically important for small holders farmers to meet HH food, nutrition and income. The dairy farming is practice across Dzongkhags and there is no social stigma attached to this enterprise. Current self-sufficiency ratio of dairy products is 88.8% and Department aims to increase to 91 % by end of 12 th FYP.
3	Egg	Currently, the country is meeting the demand for egg through domestic production. However, as per FAO standard, the present production do not meet the per capita requirement. There is a huge scope to increase domestic production to meet internal requirement and for export.

Priority commodity 1: DAIRY

Justification: Dairy is the biggest livestock enterprise with 78% of rural population rearing dairy cattle for food, nutrition and livelihood. It is socially accepted by Bhutanese society.

VALUE CHAIN	TYPE OF SUBSIDY	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES	
			Subsistence (up to 5 cows)	Semi-commercial (6-20 cows)	Commercial (≥21 cows)		
Value Chain	Production	Dairy animal					
		Animal procurement	To overcome the shortage of quality dairy animals	30:70 of actual cost for maximum of 5 cows	30:70 of actual cost for maximum of 15 cows	30:70 of actual cost for maximum of 25 cows	One-time support for maximum number of cows under subsidy program
		1.2 Transport cost	Lack of capacity of farmers	100:0	100:0	100:0	One-time support for maximum number of cows under subsidy program
		1.3 Insurance	Covered under PSL	10:90 of actual cost per animal	0:100	0:100	One-time insurance for subsistence. For semi and commercial covered under PSL, 100 % to be covered by the beneficiaries.
		1.4 Quarantine- feed, management and labour cost	Proper management risk of animals	Nu. 3000/animal to the maximum of 5 cows	Nu. 3000/animal to the maximum of 15 cows	Nu. 3000/animal to the maximum of 25 cows	One-time support only
		Dairy breeding and production inputs					
		2.1 Dairy breeding inputs (AI inputs such as semen, LN2, gloves and sheath)	To encourage farmers to maintain high quality animals	100:0	100:0	100:0	As and when required to promote breed improvement program.

	2.2 Dairy production shed for new farms	To encourage clean milk production and ensure animal welfare	30:70 of estimated cost as per standard design from DoL up to 5 cows	20:80 of estimated cost as per standard design from DoL up to 15 cows	15:85 of estimated cost as per standard design from DoL up to 25 cows	One-time support (shed design and maximum amount ceilings to be proposed by NDRC, Yusipang)
	Portable vacuum milking medium machine	To save labour and avoid drudgery	No support	30:70 of the actual cost of unit	30:70 of the actual cost of unit	One-time support
	Dairy nutrition inputs					
	3.1 Seed/Seedling/Planting material	Improve quality of fodder and nutrition for animals	100:0	100:0	100:0	As and when required
	3.2 Fencing materials: U nails/poles/ barb wire	Improve quality of fodder and nutrition for animals	60:40 (Max 3 acres)	40:60 (Max 7 acres)	30:70 (Max 10 acres)	One-time support. Department may consider electric fencing proposed by DoA as an alternate option based on cost effectiveness and sustainability.
	3.3 Labor Saving Device (Eg. Chaff cutter and feed blocking and TMR machine)	Improve quality of fodder and nutrition for animals	60:40 Maximum one per farm	40:60 Maximum one per farm (exclusive of PSL loans)	30:70 one per farm-PSL (exclusive of PSL loans)	One-time support
	Forage processing equipment	Enhance forage utilization and value addition	Not Applicable	60:40 Maximum one per farm (exclusive of PSL loans)	60:40 Maximum one per farm (exclusive of PSL loans)	One-time support. Department shall come up with standards (type and quantity of equipment)
Processing	Dairy processing					
	Complete and ready to operate (turnkey) post production facilities (eg. MCC, MPU, Chilling, Unit, Processing Plant, Milking can, deep fridge,	Value addition and product diversification	100:0 Only for group and cooperatives	0:100	0:100	One-time support

		butter churners, cream separator, cooling tank,						
	Marketing	Dairy product marketing						
		Dairy Marketing structures (sales counter)		100:0 Only for group and cooperatives	0:100	0:100	One-time support	
		Dairy marketing equipment (chiller/deep Freezer, display refrigerator, cool box)		100:0 Only for group and cooperatives	0:100	0:100	One-time support	
		Minimum support price for dairy products	Price gap (should not be below Cost of production)	100%	100%	100%	As and when there is market glut	

Priority commodity 2: PIGGERY

Justification: Pork is the second highest imported item in the country (1820 MT, 2017) with only about 4% of households rearing pig. Production and demand are increasing but there is limited intervention in processing and value addition.

VALUE CHAIN		TYPE OF SUBSIDY -(INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES	
				Subsistence (<10 pigs)	Semi-commercial (10-50 pigs)	Commercial (>50 pigs)		
Value Chain	Production	Piggery Inputs supply						
		1.1 Procurement of piglets from the CPB (Contract Pig Breeders)	To supplement the government farms in overcoming the piglet shortage, generate income to the farmers	43:57 subsidy of the production cost of piglet (43% of Nu,	43:57 subsidy of the production cost of piglet (43% of Nu, 3500 = Nu. 1500)	43:57 subsidy of the production cost of piglet (43% of Nu,	As and when required	

				3500 = Nu. 1500)		3500 = Nu. 1500) upto maximum of 100 piglets.	
		1.2 Supply of Breeding stock (gilt + young boar) to CPBs farmers	To meet the requirement of piglet from the breeders and encourage community participation in the breeding programme. Also, to prevent inbreeding	0:100	54:46 subsidy of the cost of production with maximum of 10 sow level (54% of Nu 11200= Nu. 6000)	54:46 subsidy of the cost of production with maximum of 20 Sow level (54% of Nu 11200= Nu. 6000)	Replace after 6 th lactation in the ratio of Gilt : boar (5:1)
		1.3 Piggery breeding inputs (AI)	For efficient pig breeding, production and faster genetic gain	100:0	100:0	100:0	Continuous
		1.4 Transportation of piglets and breeding stock to the farmers	The transport of the piglets and breeding stocks is done by the government to reduce the cost of transportation in bulk. It is also to reduce the mortality and ensure the minimum welfare requirement to the animals during transportation.	100:0	100:0	100:0	As and when required
		2 Construction of sheds for fatteners and breeders					
	Processing	2.1 Breeding shed support under government subsidy package as per standard shed design	Improved housing required to ensure optimum piglet productivity, hygiene, and animal welfare and	70:30	70:30 subsidy. Has to pursue through PSL but eligible for piglet buy back scheme as sl # 1.1 above.	70:30 subsidy. Has to pursue through PSL, but eligible for piglet buy-	Standard shed design and costing to be done by NPiRC, Gelephu

			also to reduce disease incidences.			back scheme as sl# 1.1 above.	
		2.2 Fattening shed support as per standard shed design	Improved housing required to ensure optimum pork production, hygiene, and animal welfare and also to reduce disease incidences.	Limited to 10 nos. of CGI sheets (12 ft. Of 0.40 mm) and 10 bags cement (50 kgs) for 10 pigs capacity	Fattening farms to pursue under PSL scheme but eligible for free top-up subsidy support of CGI sheets (0.40 mm) for semi-commercial farm.	Fattening farms to pursue under PSL scheme with free top-up subsidy support of CGI sheets (0.40 mm) and fabricated iron doors for commercial farm.	Eligible till 100 fatteners Standard shed design and costing to be done by NPiRC, Gelephu
3 Processing and Value addition							
		3.1. Equipment support for hygienic pork-based processing and value addition.	In order to ensure animal welfare and clean pork production through humane approach, the need for quality value added equipment (stunner) is required. This will also ensure reduced TAT on the processed product.	100:0	100:0	100:0	One-time supply of one stunner each to all types of farm
	Marketing	Levelling and packaging of value-added pork	The attractive labelling and packaging using the food grade plastic materials is important to attract the market and ensure safety of the consumers	0	50:50	50:50	One time support to groups and cooperative only

		Minimum support price for pork and pork products	Price gap (should not be below the cost of production)	100%	100%	100%	As and when there is market glut
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Priority commodity 3: POULTRY

Justification: Highest contributor to domestic meat production (36%). Production and demand are increasing but there is limited intervention in processing, value addition and marketing. Marketing has been the Achilles heel for chicken farming. Self-sufficiency in eggs. This needs to be maintained and taken up further to meet the self-sufficiency as per WHO standard of 200 eggs/ person/year.

VALUE CHAIN	TYPE OF SUBSIDY - (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES	
			Subsistence (<500 birds)	Semi-commercial (500-1000 birds)	Commercial (>1000 birds)		
Value Chain	Production	Supply of Broiler DOC and associated costs					
		1.1 Supply of DOC for broilers from in-county government farms	Ready availability of DOC is a major issue as the demand is not production but market rate driven. Private sector is heavily involved in opportunistic DOC supply from India.	Subsidy of 52:48 in kind for DOC from the total cost of production	Subsidy of 52:48 in kind for DOC from the total cost of production	Subsidy of 52:48 in kind for DOC from the total cost of production	As and when required
		Chicken production inputs					
		2.1 Construction of broiler/layer farm shed (construction materials, eg. cement, CGI sheet, nets, nails, electrical fittings)	Initial investment for the% of the cost of construction of the setup of the farm infrastructure is heavy which the farmers may not be able to meet. The structure of poultry pen with standard quality using the local	40:60of the cost of construction of the house based on DoL standards	30:70 of the cost of construction of the house based on DoL standards	20:80 of the cost of construction of the house based on DoL standards	One-time support. Shed design and standard estimate to be worked out by NPRDC

			materials will last for about 4 to 5 years				
		2.2 Farm equipment feeder/drinker/nest/brooders/de-beakers/defeathering machine	Quality set of farm equipment required which also incurs substantial amount of budget to the farmers. One-time supply will last for about 2 to 3 years during which the farmer would be able to sustain the business.	30:70 subsidy of actual cost	20:80 subsidy of actual cost	10:90 subsidy of actual cost	One-time support for the initial setup. standard estimate to be worked out by NPRDC
		2.3 Farm semi automation (labor saving deice)- nipple drinker/pan feeder.	Farm equipment with labor saving device is required in semi-commercial and commercial farms.	Not eligible	30:70 in kind subsidy for the farm semi-automation waterers and feeders with maximum of Nu. 16200/100 birds (30% of the cost of Nu. 54,000)	20:80 in kind subsidy for the farm semi-automation waterers and feeders with maximum of Nu. 27000/100 birds (50% of the cost of Nu. 54,000), Subsidy support up to 5000 birds.	One-time support to the farmer starting the business for the first time
Processing and Marketing	Post production and processing						
		Basic equipment for clean chicken production.	Basic processing equipment (water bath, SS knives etc.) are essential for the clean meat production. This will encourage the farmers to take up the business.	30:70 subsidy of the actual cost.	20:80 subsidy of the actual cost.	10:90 subsidy of the actual cost.	Cost estimate to be worked out by NPRDC One-time support and the Department will come up with standards (types and number of equipment to be provided with detail costing)
		Labelling and packaging of value-added chicken	The shelf life of the chicken basically depends not only on the clean meat production but also on the proper packaging. The	0:100	50:50	50:50	One-time support to the group/cooperative only

			attractive labelling and packaging using the food grade plastic materials is important to attract the market and ensure food safety.				
		-Groups and cooperatives will link with the existing meat venders for marketing of value added products.		100:0	100:0	100:0	-Once for every producers group/cooperatives - only for 6 months - Four consignments
		-Leasing of sales counters in urban markets		70:30	60:40	50:50	As and when there is market glut
		- Minimum support price for chicken and their products	Price gap (should not be below cost of production)	100%	100%	100%	

Priority commodity 4: HONEY

Justification: High value low volume niche product with high export potential. There is increasing demand in the domestic market.

VALUE CHAIN	TYPE OF SUBSIDY - (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES
			Subsistence (5 hives)	Semi-commercial (6-20 hives)	Commercial (≥20 hives)	

Value Chain	Production	Supply of basic beekeeping equipment (set) & Bee colonies	For hygienic honey production and propagation of healthy bee colonies	<p>In kind-80:20 support on the following.</p> <p>Bee colonies with queen maximum upto 5</p> <p>1 set starter Nu. 4000/package with maximum 1 per individual.</p> <p>Improved movable frame hive set-Nu. 3000/set for <i>A. mellifera</i>& Nu. 2500/set for <i>A. cerana</i>, with maximum 5 hives</p> <p>Casting machine-Nu. 78000/set with maximum of 1 producing at least 100 kg honey/year</p> <p>Honey extractor (small)-Nu. 25000/set maximum of 1 producing at least 100 kg honey/year.</p> <p>In kind-50% subsidy on beekeeping safety gear (veil, dangri& gloves)</p> <p>Full subsidy for packaging bottles with caps and labels-300 nos. provided production more than 100 kg/year/group.</p>	<p>In kind-40:60 support on the following.</p> <p>Bee colonies with queen maximum upto 10</p> <p>1 set starter Nu. 4000/package with maximum 1/group member.</p> <p>Improved movable frame hive set-Nu. 3000/set for <i>A. mellifera</i>& Nu. 2500/set for <i>A. cerana</i>, with maximum 10 hives /group member</p> <p>Casting machine-Nu. 78000/set with maximum of 1 producing at least 500 kg honey/year</p> <p>Honey extractor (medium)-Nu. 35000/set maximum of 1 producing at least 500 kg honey/year.</p> <p>In kind-50% subsidy on beekeeping safety gear (veil, dangri& gloves)</p>	<p>In kind-20:80 support on the following.</p> <p>Bee colonies with queen maximum upto 15</p> <p>1 set starter Nu. 4000/package with maximum 1/group member.</p> <p>Improved movable frame hive set-Nu. 3000/set for <i>A. mellifera</i>& Nu. 2500/set for <i>A. cerana</i>, with maximum 20 hives /group member</p> <p>Casting machine-Nu. 78000/set with maximum of 1 producing at 1000 kg honey/year</p> <p>Honey extractor (large)-Nu. 50000/set maximum 1 of producing at least 1000 kg honey/year.</p> <p>In kind-50% subsidy on beekeeping safety gear (veil, dangri& gloves)</p> <p>Automatic honey filler-Nu. 350,000 with maximum of 1 producing at least 1000 kg honey/year</p> <p>Full subsidy for packaging bottles with caps and labels-1000 nos. based on production</p>	<p>One-time support</p>

					Full subsidy for packaging bottles with caps and labels-500 nos. provided production is more than 500 kg/year/group. 80% subsidy for advertisement in media, including production of the ads.	output of more than 1000 kg/group. 100% subsidy for construction of honey extraction unit (sales counter and processing room) -1 producing at least 1000 kg/year 80% subsidy for advertisement in media, including production of the ads.	
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Priority commodity 5: CHEVON

Justification: High value product generates high income and has potential to be pro-poor commodity contributing to meat sufficiency. Increasing demand for chevon enterprise and potential to significantly contribute to meat self-sufficiency in the country.

VALUE CHAIN		TYPE OF SUBSIDY (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES
				Subsistence (<10 goats)	Semi-commercial (11-20 goats)	Commercial (≥21 goats)	
Value Chain	Production	1. Supply of breeding stock and associated costs					
		Supply of exotic bucks and doe for breeding	Bhutan do not have good quality goats for meat production and so need to import from India. The demand is high from the field for the exotic breeds with better meat production and disease resistance after crossing with the local goat population.	80:20 subsidy for the supply of breeding exotic bucks and Doe with maximum of 3 nos. (1 buck and 2 Doe)	40:60 subsidy for the supply of breeding exotic bucks and Doe with maximum of 5 nos. (1 buck and 4Doe)	20:80 subsidy for the supply of breeding exotic bucks and Doe with maximum of 10 nos. (1 buck and 9 Doe)	One-time support.

		Construction of goat farm shed (cement and CGI sheet)	The standard goat shed/pen is required for optimum chevon productivity ensuing the animal welfare and also to reduce disease incidences. The shed also should have provisions for the disposal of the dung to maintain the hygiene and diseased transmission marinating the minimum bio-security of the farm. There also should have fencing of the premises.	80:20 subsidy of the actual cost	40:60 subsidy of the actual cost	20:80 subsidy of the actual cost	One-time support. Standard shed design and cost estimate to be worked out by NHRDC
	Post production and marketing	2. Post production, processing and marketing inputs					
		Basic equipment for clean Chevon production and marketing	Basic processing equipment (deep freezer, processing equipment and transportation trays, cold boxes, SS knives etc.) are essential for the clean meat production. This will ensure the quality and the cleanliness of the meat in the market.	20:80	10:90	0:100	One-time support. The standards on (type, quantity and cost estimate to be worked out by the Department)
		2.2 Producers will be linked with the existing meat venders and super market.	sales outlets	100:0	100:0	100:0	One-time support. cost estimate to be worked out by NHRDC
		2.3 Minimum Support price	Price gap (should not be below cost of production)	100%	100%	100%	As and when there is market glut.

Priority commodity 6: Fish

Justification: Contributes to household nutrition. Import is very high (92%) in 2015

VALUE CHAIN	TYPE OF SUBSIDY (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES	
			Subsistence (<500 sq m)	Semi-commercial (501 sqm - 3 acres)	Commercial (>3 acres)		
Value Chain	Aquaculture						
	Production	Fish farm establishment (Example, Construction of fish ponds and dyke)	For household food/nutrition security, enhancement of rural livelihood, beneficial engagement of youth and disadvantaged women and enhance national output of farmed fish toward reducing import.	100:0 subsidy for establishing a fish farm with effective production water surface area of up to 500 sqm.	Subsidy of Nu. 48/sqm of total farm size subject to a minimum size of 501 sqm and a maximum size of 2 acres.	Subsidy of Nu. 48/sqm of total farm size subject to a minimum size of 12000 sqm (approximately 3 acres) and a maximum size of 40000 sqm (approximately 5 acres)	one-time support
		Fish farm water supply/ irrigation system	Ensure adequate supply of water to operate fish farm	100 :0	Subsidy of Nu. 22/sqm of total farm size subject to a minimum size of 501 sqm and a maximum size of 2 acres.	Subsidy of Nu. 22/sqm of total farm size subject to a minimum size of 12000 sqm (approximately 3 acres) and a maximum size of 40000 sqm (approximately 5 acres)	One time
		Fingerlings (ordinary & stunted)	Encourage farmers to take up fish farming and enhance production	100:0	50:50 of total cost of fingerlings	25:75 of total cost of fingerlings	One-time support

		Equipment (Drag net, cast net, deep freezer, weighing scales, transportation box, fish packaging materials, ice making machines and other such production and post-production equipment)	Enable efficient production of fish, marketing and value addition/ product development	Free supply of 1 drag net (30 m length and 3 m breadth) and 1 cast net (7 kg capacity)	50:50 of actual cost of equipment	70:30 of actual cost of equipment	One-time support and the Department will come up with standards (types and number of equipment to be provided to semi and commercial farms)
Value Chain	Trout Aquaculture						
	Production	Construction of raceways including water supply,	Encourage fish farming among the youths/ Ensure year-round water supply for maximizing fish production	1 raceway; (20m* 2m * 1m) 100% free	2-4 raceways; (20m * 2m * 1m) 100% free up to 3 raceways	5-8 raceways; (20m * 2m * 1m) 100% free up to 6 raceways	One-time support
		Supply of fingerlings	Encourage farmers to take up fish farming and enhance production	100:0 (Maximum of 4,000 fingerlings)	100:0 (Maximum of 16,000 fingerlings)	100:0 (Maximum of 22,000 fingerlings)	Free and One-time support
		Supply of trout feed	Encourage farmers to take up fish farming an enhance production	50:50 (up to 1 MT)	30:70 (up to 4 MT)	20:80 (up to 8 MT)	One-time support
	Post production	Post-harvest equipment	Produce quality fish products	100:0	50:50 of actual cost	50:50 of actual cost	One-time support and the Department will come up with standards (types and number of post-harvest equipment)

Riverine and Lake Fisheries (Capture Fisheries)						
Post production	Post-harvest facilities and fisheries equipment for capture fisheries.	To supplement fish production.	100:0	100:0	100:0	One-time support
Marketing	Minimum support price	To meet the price gap (it should not be below cost of production)	100%	100%	100%	As and when there is market glut
	4.2 Promotional Program (Shrimp, Turkey, rabbit, Mastiff, Pheasant, quail, Guinea fowl and emerging breeds of livestock)					100:0

Priority commodity 7: BIOGAS

Justification: Source of green energy and environmentally friendly technology to mitigate greenhouse gas emission. It can reduce import of LPG and use of firewood.

VALUE CHAIN	TYPE OF SUBSIDY (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY–GOVERNMENT: BENEFICIARY %)			MODALITIES
			Subsistence	Semi- commercial	Commercial	
Biogas						
Biogas support	Construction of bio-gas plant	The cost of bio-digester and the accessories are costly which farmers cannot afford. The subsidy would encourage farmers to take up the program which ultimately contributes	50:50 subsidy on the cost of construction of bio-digester and its accessories (for 4 cubic meter, 6 cubic meter and 8 cubic meter plant)	40:60 subsidy on the cost of construction of bio-digester and its accessories (10-50 cubic meter plant)	30:70 subsidy on the cost of construction of bio-digester and its accessories (above 50 cubic meter plant)	One-time support.

			to the reduction of green gas				
		Biogas and its bi-product packaging and marketing	In order to substitute the alternate means of energy to LPG gas, there will be demand for biogas product. It needs to be promoted and marketed.	0	30:70 subsidy on the cost of construction of bio-digester and its accessories for all sizes of biogas	30:70 subsidy on the cost of construction of bio-digester and its accessories for all sizes of biogas	One-time support. Support will be provided only for the bottling equipment

Priority commodity 8: Highland Livestock Production

Justification: The livestock herders residing in the northern frontiers of the country reside in these areas under harsh environmental conditions. They depend on livestock like yak, sheep, horses, mastiff for their food, nutrition and livelihood. While they reside in these northern frontiers, they also help to safeguard the territorial boundary of the country. Therefore, it is very important that they are adequately incentivised through subsidy programs.

VALUE CHAIN		TYPE OF SUBSIDY -(INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)		MODALITIES
				Individual herders	Groups	
Value Chain	Production	Highland livestock production (Yak, Sheep, Horses, Mastiff)				
		Animal procurement	To overcome the shortage of quality animals	80:20	80:20	One-time support
		1.2 Transport cost	Lack of capacity of farmers	100:0	100:0	One-time support
		1.3 Insurance	Not covered under PSL	10:90 of actual cost per animal	10:90 of actual cost per animal	One-time insurance for individual herders and groups

	1.4 Quarantine- feed and management cost	Proper risk management of animals	Nu. 3000/Large, Nu.1500/small animal	Nu. 3000/Large, Nu.1500/small animal	One-time support
Highland Livestock breeding and production inputs					
	2.1 highland livestock breeding inputs / AI (yak/ram/stallion/mastiff/donkey)	To encourage farmers to maintain high quality animals	100:0	100:0	Continuous
	2.2 support highland livestock shed for calf /sheep/mastiff	To encourage clean milk/meat/wool production and ensure animal welfare	60:40 of estimated cost as per standard design from DoL	60:40 of estimated cost as per standard design from DoL	One-time support
	2.3 support construction of highland livestock herder camps and supply yak hair tents	To encourage clean milk/meat/wool production and ensure herder welfare	80:20 of estimated cost as per standard design from DoL	80:20 of estimated cost as per standard design from DoL	One-time support
	2.4 support construction of riding tracks and horse stables at strategic locations for horse riding, supply of riding equipment (saddles etc)	To encourage value added use of horses and income generation through ecotourism	0:100	50:50	One-time support. The standards on shed design, type and quantity of riding equipment to be determined by the Department
Highland Livestock nutrition inputs					
	3.1 Seed/Seedling/ Planting material/cuttings/polybags	Improve quality of fodder and nutrition for animals	100:0	100:0	As and when required
	3.2 Fencing materials: U nails/poles/ barb wire, electric/solar fencing	Improve quality of fodder and nutrition for animals	60:40	60:40	One-time support. Department may consider electric fencing proposed by DoA as an alternate option based on cost effectiveness and sustainability.

		3.3 supply urea molasses mineral blocks	To improve nutrition of animals	80:20	80:20	As and when required
		3.4 Labour Saving Device (Chaff cutter, brush cutter, scythe, serrated sickles, sharpening stones, mower machine, feed blocking, UMMB and TMR machine, electric fencing)	Improve quality of fodder and nutrition for animals	60:40 Maximum one per farm	60:40 Maximum one per farm	
		3.5 supply CGI sheets, plastic sheets and cement	For fodder conservation and use during lean months	80:20	80:20	One-time support,
		3.6 animal health/veterinary medicines/Vaccines/ mineral mixtures	To control livestock diseases and improve animal health	100:0	100:0	
		Promote climate smart technologies in the highlands				
		4.1 promote alpine bio gas (on pilot basis)	To provide easy access to cooking fuel	80:20	80:20	Few sets will be established as promotional program and looking into its success it can be upscaled
		4.2 promote bio briquette	To provide easy access to cooking fuel	80:20	80:20	Few sets will be established as promotional program
		4.3 supply of solar lamps	To provide light where electricity is not available and charging options	80:20	80:20	
		Highland livestock product processing				
	Processing	Post production structures (MCC, MPU, Chilling Unit, Deep fridge, Cooling tank)	Value addition and product diversification	0:100	100:0 Only for group and cooperatives	One-time support, drawing /design as per DoL

	5.2 Post production equipment (Milking can, milking buckets, butter churners, Cream separator, Potable Milking machine (small/medium)	Improve product hygiene and labour saving and avoid drudgery	90:10	90:10	One-time support
	5.3 supply of equipment (wool shears, wool carding/spinner, scissors, yak hair shears/comb, felting needles	Product diversification and value addition	90:10	90:10	One-time support
	5.4 supply of cheese making equipment (cheese vat, cheese press, steam boiler,	Product diversification and value addition	90:10	100:0	One-time support
Marketing	Highland livestock product marketing				
	6.1 Marketing structures (sales counter), storage facility	To facilitate marketing and product storage	0:100	100:0 Only for group and cooperatives	One-time support
	6.2 Marketing equipment (chiller/deep Freezer, display refrigerator, cool box, packaging materials)	For product hygiene and better presentation of products	0:100	100:0 Only for group and cooperatives	One-time support
	6.3 Establishment of small manufacturing units for traditional products/ costumes/ yak hair tents / woollen products	To provide employment and income generation	90:10	100:0 Only for group and cooperatives	One-time support

Priority Commodity 9: Conservation and sustainable utilization of indigenous livestock breed

Indigenous livestock and promotional program (new technologies)		
Indigenous livestock breed (cattle, sheep, pig poultry, yak, horse, goat)		100% support subsistence farmers

Note: The department on a case by case basis based on research purposes, meet emergency needs and upon directives.

Department of Forests and Park Services

The policy of the Royal Government to provide subsidized forest goods and services to the Bhutanese citizens dates back to the time when planned development in the Kingdom started and the policy was further enhanced in the first forest act enacted in 1969 and subsequent national forest policy formulated in 1974.

The implementation of subsidy policy in forest resource allocation have benefited our people immensely especially the rural communities through the period when our people were still contended with individual house hold level economy and the purchasing power of the farmers were at the lowest.

A well-intentioned policy of the government, it has served the purpose for which it was put in place. All the Bhutanese citizens have been the beneficiaries of this Kidu till date.

Time has changed a great deal now. The socio-economic condition of our people improved manifolds and their purchasing power as well. The all-round development of the country is racing with leap and bounds. The simple economy of self-sufficiency experienced by the kingdom is transiting to a vibrant market economy leaving impacts in all areas.

It is a natural sequel that the area of resource conservation and management to experience the maximum impact of these development processes because of the fact that livelihood of majority of Bhutanese population are strongly linked to the forest resources of the country.

Rapid development is therefore putting huge pressure on the resources with demands always showing upward trend and degrading the accessible forest areas by the day. The complacency among the resource users and the trend to liberalise the use of natural resources with a mindset that these are easy and unlimited, can lead to a situation when Kingdom of Bhutan is no more reflected as one of the leading nations pursuing conservation friendly development.

Hence there is a strong and urgent need to revisit this subsidy policy of forest produce in light of new development in resource management paradigm, socio economic strength of the communities and the nation, changing national conservation priorities and local needs and not the least to face the new system of governance with a policy and strategy that is dynamic, transparent and strong.

Table 5: Rationale for selection of commodities for priority investment

Sl. No.	Commodity	Justification
1	NWFPs	There are 55 important NWFPs listed below. NWFPs are very important for our rural people living in the vicinity of the forests. NWFPs generate income for the farmers. Collection of NWFPs are allowed only after forming group and seeking approval from the Department of Forests and Park Services with Management Plan.
2	Ecotourism	Tourism is one of the major sources of hard currency for Bhutan and plays a major part in our country's economic growth. In the protected areas where people were hampered due to stringent conservation policies and rules adversely impact these local

		communities. To achieve both community development and conservation goals, ecotourism is one of the priority commodities identified in the “Integrated Conservation and Development Programs” under the protected area managements.
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Table 6. List of Important NWFPs

Sl. No.	NWFPs	Local Name / common name
1	<i>Asparagus recemosus</i>	Nyakhachu (Dz)
2	<i>Bambusa spp.</i>	Baa (Dz)
3	<i>Cane spp.</i>	Patsha (Dz)
4	<i>Mushroom spp.</i>	Shamu (Dz)
5	<i>Aconitum spp.</i>	Bongkar (Dz)
6	<i>Aconogonon tortusum</i>	Ngalacho (Dz)
7	<i>Acorus calamus</i>	Chudala (Dz)
8	<i>Artemisia spp.</i>	Khempa (Dz)
9	<i>Asphalum punjabinum</i>	Drakzhu (Dz), Shilijit (Lh)
10	<i>Casia fistula</i>	Rajbrikshay (Lh), Donkoshing (Sh)
11	<i>Choerospondia axillaris</i>	Lapsi (Lh)
12	<i>Ophiocordyceps sinensis</i>	Yar-tsha guenbub (Dz)
13	<i>Cymbopogon spp.</i>	Lemon grass (Eng), Sorbhang (Sh)
14	<i>Daphne spp.</i>	Desho(Dz)
15	<i>Edgeworthia gardneri</i>	Dheykap (Dz), Argaylee (Lh)
16	<i>Diplazium esculentum</i>	Nakey (Dz), Dhawai (Sh)
17	<i>Diploknema butyracea</i>	Yega shi (Dz), Butter tree (Eng)
18	<i>Elastosteme lineolatum</i>	Dham-boor (Dz), Drimom(Sh)
19	<i>Entada eheedii</i>	Pangri (Lh), Kolokpa (Sh)
20	<i>Fritillaria delavayi</i>	Tseka (Dz)
21	<i>Gaultheria fragrantissima</i>	Chamze Kam (Dz), Machino (Lh)
22	<i>Illicium griffithii</i>	Domleeshing (Dz), Khaila chinang (Sh)
23	<i>Juglans regia</i>	Tago (Dz), Kheseay (Sh), Ohkar (Lh)
24	<i>Litsea cubeba</i>	Siltimbur (Lh), Nenshing (Sh)
25	<i>Meconopsis paniculate, Myricaria rosea</i>	Upel serpo (Dz)
26	<i>Nardostachys jatamansi</i>	Wombu(Dz)
27	<i>Neopicrorhiza scrophulariiflora</i>	Pangpoi (Dz), Jatamansi (Lh)
28	<i>Neopicrorhiza acrophulariiflora/ Picrorhiza kurroo</i>	Putishing (Dz), Kutki (Lh)
29	<i>Paris polyphylla</i>	Satuwa (Lh)
30	<i>Pedicularis longiflora</i>	lugru serpo (Dz)
31	<i>Pedicularis megalantha</i>	Lugru marpo (Dz)
32	<i>Persia spp.</i>	Gooli (Dz, Sh)
33	<i>Persia gamblei</i>	Kawla or Kathe Kaulo (Lh)
34	<i>Phyllanthus emblica</i>	Churoo (Dz), Amala (Lh), Chorgnsay (Sh)
35	<i>Piper betleoides</i>	Pani or Paney (Dz) Pan (Lh)
36	<i>Piper hamiltonii</i>	Jungali pan (Lh)

37	<i>Piper longum</i>	Pipla/peepla Lh)
38	<i>Piper pedicellatum</i>	Pipla
39	<i>Podophyllum, Hexandrum</i>	Bamarpoo (Dz)
40	<i>Resin</i>	Thangchu (Dz)
41	<i>Rheum australe</i>	Chutsa (Dz)
42	<i>Rheum nobile</i>	Chhukkha metog (Dz)
43	<i>Rhododendron anthopogon</i>	Balu (Dz), Dali Metog
44	<i>Rhododendron setosum</i>	Soonpati or sunpatey (Lh) Sulu (Dz)
45	<i>Rubia cordifolia</i>	Tsoy (Dz), Majito (Lh), Lanyi-roo (Sh)
46	<i>Sapindus mukorossi</i>	Soap nut (En), Ritha (Lh), Nakapani (Dz)
47	<i>Swertia chirayita</i>	Chirata (Eng), Chiraito (Lh)
48	<i>Symplocas paniculata</i>	Pangtse (Dz), Zim-shing (Sh), Gunilo (Lh)
49	<i>Taracum eriopodum</i>	Khurmong (Dz)
50	<i>Terminalia bellirica</i>	Baru, Baroo (Dz, Sh)
51	<i>Terminalia chebula</i>	Aru, aroo (Dz, Sh), Har-ra or Ha ro (Lh)
52	<i>Thysanolaena latifolia</i>	Tsakusha (Dz, Sh), Kusho or amlisa (Lh)
53	<i>Zanthoxylum armatum</i>	Thinngey (Dz), Timbur or Timur (Lh), Gi (Sh)
54	<i>Zizyphus mauritiana</i>	Bayer (Lh), Tshoshing (Dz)
55	<i>Viscum nepalensis</i>	Nyashingjormo (Sh)

Categorization and Definition

1. **Subsistence:** In this policy document, the sustenance is meant for a farmer or a group of farmers with no source of income for his/her household or for the group's account.
2. **Semi-commercial:** Investment up Nu. 1 million
3. **Commercial:** Investment up to 5 million

VALUE CHAIN		TYPE OF SUBSIDY - (INPUT)	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES
				Subsistence	Semi-commercial	Commercial	
Priority commodity 1: NWFPs							
Value Chain	Production	Seed/rhizome	To reduce over exploitation wild resources and conserve resource at its natural habitat.	100:0			Every year Investment less than Nu. 0.1 million
		Seedling production			50:50	50:50	Only once Investment upto Nu. 5 million.
Value chain	Marketing	Construction of processing house, drying shade	To produce quality NWFPs products		60:40	60:40	One time per group Investment upto Nu. 5 million.
		Processing tools and equipment and packaging materials	Value addition. For better accessibility, increasing shelf life		80:20	80:20	Only one time Investment upto Nu. 5 million
		Facilitate marketing of NWFPs products		100:0	100:0	100:0	One time The quantity produce should make a bolero load. One time
		Branding and institutional support	To enhance marketability of Bhutanese NWFP products, contribute to income generation	100:0	100:0	100:0	Need based

VALUE CHAIN	TYPE OF SUBSIDY	JUSTIFICATION	BENEFICIARIES (SUBSIDY-GOVERNMENT: BENEFICIARY %)			MODALITIES
			Subsistence	Semi-commercial	Commercial	
Priority commodity 2: Eco-tourism						
Value chain	Homestay for individuals	Youth employment, promotion of ecotourism in rural areas, income generation, promote nature based enterprise	10:90	10:90	10:90	One time
	Eco-lodge, roadside amenities, eco-trails, recreational sites and equipment are for group of households in the village		70:30	70:30	70:30	One time
Marketing	Marketing support (advertisement, website, applications, link to tour operators and tourists, visitors, etc.)	To make economically viable, employment, attract tourists/visitors		100:0	100:0	One time

National Biodiversity Centre

Bhutan is part of the Eastern Himalayas and endowed with rich biological resources which have been protected due to the wise and far-sighted leadership, sound policies and inherent respect for nature by the Bhutanese people. As a result, Bhutan is bestowed with a diverse array of flora and fauna. Conservation has always played a pivotal role in Bhutan's development history and concern for the natural environment and biological diversity is deeply embedded in Bhutanese traditional beliefs, socio-cultural outlook and the overarching development philosophy of Gross National Happiness (GNH). However, conservation may become challenging with the rapid socio-economic development of the country and there is a need to explore innovative measures to incentivize and ensure the continuity of biodiversity conservation through research and commercial utilization and securing of fair and equitable sharing of benefits. As a country that has maintained a largely intact biodiversity, Bhutan has a strong relative advantage over most countries in the region and stands to benefit greatly through the sustainable utilization of its Biological resources. In addition to the diversity of medicinal plants and genetic resources, Bhutan also has vast Traditional Knowledge (TK) associated with biological resources which could provide a unique opportunity for exploration of Biological resources, guided by the Traditional Knowledge which could lead to potential benefits through discovery of new compounds and drugs.

Bhutan 2020 also highlights:

“The rich biodiversity may have a unique role to play at the global level in maintaining the genetic material required to guarantee food supplies for a growing world population as well as in the development of new pharmaceutical products. Our rich biodiversity may confer upon us a distinct comparative advantage in the development of new and clean industries based upon bio-prospecting and genetic engineering - industries that could help to place Bhutan in the vanguard of scientific advance for the benefit of humankind”.

(Bhutan 2020)

Bhutan became a member of the Convention on Biological Diversity in 1995 and ratified the Nagoya Protocol on Access and Benefit-Sharing in 2013. Bioprospecting and Access and Benefit Sharing (ABS) Program was initiated within NBC in the mid of 10th FYP to conduct exploration and research on biological resources of the country for natural product development and bio-discovery with the engagement of local communities. The program strives to secure and maximize the benefits from the commercial and research utilization of Bhutanese genetic resources and associated traditional knowledge by identifying and prioritizing genetic resource and traditional knowledge with great potential. The benefits accrued will be directed towards the conservation and sustainable use of biodiversity in the country through peoples' participation and leadership as well as contribute towards the enhancement of rural livelihood. Biodiversity conservation at the community level will be enhanced through community initiatives and participation, promoting people-centric conservation.

VALUE CHAIN		TYPE OF SUPPORT	JUSTIFICATION	BENEFICIARIES (SUBSIDY–GOVERNMENT: BENEFICIARY %)			MODALITIES
				Subsistence	Semi-commercial	Commercial	
Priority Commodity 1: Nature based (Bioprospecting and ABS) Products							
Value chain	Production	Seed & seedlings	Sourcing of plants for nature based product development for distribution to the local communities.	100:0	50:50	30:70	One time In the beginning of the project
		Construction of poly house for nursery establishment commercially important plants	Conservation and propagation of potential plants.	80:20	60:40	30:70	One time In the beginning of the project
		Harvesting, processing tools including plant extraction and product development facilities	Establishment of facilities required for product development are very expensive	100:0	50:50	30:70	One time
		Procurement of raw materials	Support procurement of raw materials (ingredients) required for the nature based products as they are expensive.	80:20	60:40	30:70	Yearly
		Capacity building of local communities in the nature based product development	Train and build capacity of communities in nature based product development.	100:0	50:50	50:50	Yearly And as and when required

	Marketing	Capacity building of local communities in branding and marketing the nature based products	Train and build capacity of communities in branding and marketing the nature based products	100:0	50:50	50:50	Yearly And as and when required
		Support in marketing of the products	Support the marketing of nature based products under the framework of Access and benefit Sharing as a 'High value low volume' niche products by building capacities and linking with business partners. This will contribute to youth employment, income generation and enhancement of livelihood.	50:50	50:50	50:50	As and when required
		Procurement of surplus produce	Encourage communities to continue with the production in the beginning until the market becomes stable.	80:20	60:40	30:70	As and when required
Priority Activity 2: Support to the Community based natural resource management group							
Value Chain	Production	Support in the Construction of poly house for nursery establishment commercially important plants	Conservation and propagation of potential plants.	80:20	60:40	30:70	One time In the beginning of the project
		Propagation, Harvesting and processing tools and associated capacity building programs	To encourage community participation in conservation	100:0	50:50	30:70	One time

	Marketing	Explore market for the produce	Support value addition and scout potential market	50:50	50:50	50:50	As and when required
		Procurement of surplus produce	Encourage communities to continue with the production in the beginning until the market becomes stable.	80:20	60:40	30:70	Yearly as in the case of <i>Cymbidium erythraeum</i> and <i>Swertia chirayita</i>

Department of Agriculture Marketing and Cooperatives

In order to support marketing of RNR products, the Department of Agricultural Marketing and Cooperatives (DAMC) promotes efficient and effective marketing systems, facilitates market linkages and strengthens farmers groups and cooperatives. Keeping in line with the ministry's goal of self sufficiency during the 12 FYP, the DAMC shall focus mainly on development of domestic markets. The department shall establish adequate market infrastructures, initiate market linkages (North-South and East-West trade and Institutional linkages), encourage value addition, promote group marketing and provide market information to guide the production.

In the past, the marketing subsidy and support were focused on infrastructure development, market linkages, value addition, transportation (during market promotion stage and during market failure) and capacity building. In the 12 FYP and beyond, the department shall continue to provide these supports and also promote agri-based enterprises. Furthermore, the department shall strive to provide price gap support to the farmers in the event of extreme market failure to cover their cost of production and marketing.

For produce that have demand in the export market and have the potential to enter new markets, the department shall support export and explore new markets.

All marketing related supports, wherever relevant are integrated in to agriculture, livestock and forestry sectors.

4. GENERAL GOVERNANCE AND IMPLEMENTATION MODALITY

Implementation modality for farming incentives

The following implementation modalities will be adopted for providing farming incentives during the 12th FYP.

Beneficiaries

- i. The incentives will be provided to individual farmer, farmers' group/cooperative, and private sector (enterprises).
- ii. Beneficiaries also include schools, monasteries, NGOs, CSOs and rehabilitation centres.

Governance

- i. Subsidy packages will be resource dependent, which implies that support will be provided only if fund is assured.
- ii. Farmers contribution as per CSM for households below the poverty line (pro poor) identified by the Government could be waived off by the implementing agencies provided the value of incentive is below Nu. 0.100 million for individual or Nu. 0. 500 million for group.
- iii. Subsidy for private sector and commercial scale investment shall be proposal based.

- iv. The proposal should be verified for technical and economic feasibility in accordance with the priority of the planned programme.
- v. The proposal may include any input necessary along the value chain.
- vi. The registered farmers groups and cooperatives will get preference over individuals.
- vii. Youth groups will receive preferential over general groups.
- viii. Women groups/female-headed households will receive preference for support in the wake of feminization of farms.
- ix. The priority shall be given to farmers/groups/private sector applying for the support for the first time.
- x. The prioritized commodity listed above will get preference over other commodities.
- xi. FDI proposals will have to follow FDI policy/guideline and will not qualify for government farming incentives.
- xii. All programme, projects and priority initiatives shall be govern by this guideline unless there are specific government directives.
- xiii. The **maximum ceiling** is set at Nu. 1.000 million considering that the proponents of semi-commercial and commercial ventures would be encouraged to avail subsidized loans from financial institutes under Priority Sector Lending (PSL) and REDCL. Such ventures would also benefits from provisions of tax exemption provided under Economic Development Policies, 2016 and Fiscal Incentives Act 2017.
- xiv. The guideline shall be reviewed annually to incorporate changes such as phased out packages and new proposals.
- xv. Procurement and supply of equipment through private suppliers should meet the standard set by the relevant authority.

Responsibility and authority to approved

The responsibility and authority to approve the incentives for different category of beneficiaries will be as mentioned in the table below:

Table 8: Responsibility and authority to approve farming incentives

Value of incentives	Requirement of proposal	Approving authority		
		Central Programme, RDCs, Commodity Programme	Dzongkhags	Department

Up to Nu. 0.500 million	Proposal not required (farmers)	✓	✓	
	Proposal required for private sector	✓	✓	✓
> Nu.0.500 million to Nu. 1.000 million	Proposal required	✓	✓	✓

Note: All the proposal should be routed through concerned Gewogs and Dzongkhags.

Subsidy dispensing modality

1. The subsidy to incentivize production shall be channelled through line departments (DoA, DoL, DoFPS and DAMC). The concerned line Department before being approved by MoF should endorse all the budgetary provision for subsidy proposed by implementing agencies.
2. The subsidy on all marketing related supports shall be channelized through DAMC.
3. This mechanism is proposed to avoid duplication in dispensing subsidy and bring in clarity on accountability and responsibility amongst the implementing agencies, line department and DAMC.

M&E mechanism

Monitoring of the subsidy programme should focus both on the achievement of the target as well as the achievement of intended purpose of providing it. Regular monitoring of the physical target and the financial expenditure should be carried out. Reporting of the achievement will be done coinciding with APA reporting, which is twice in a year. Similarly, evaluation of the impact of the subsidy should be carried out twice in a plan period.

The concerned implementing agency in the Dzongkhags, Research and Development Centres, Central programmes, Commodity programmes and projects should report the achievement (report shall capture details of support including beneficiaries) to the respective line department. The line departments should identify appropriate Division/section with focal person to compile, analyse and report to PPD, MoAF and other concerned agencies in and outside the Ministry.

5. ANNEXURES

Annex 1: Mapping of existing farming subsidy

Table 1: Agriculture sector

Commodity/ components	Proportion	Approving authority	Issues/gaps/concerns	Interventions and changes required
<i>Seeds & seedlings(NSC) production</i>	<i>10% of Exp (24.962m)</i>	<i>DoA, NSC,</i>	<i>Government support is less than the actual expenditure and revenue gap. The gap is addressed through earning from other activities.</i>	<i>Revenue and expenditure gap to be supported by the government</i>
<i>Seeds & seedlings & fertilizer(NSC)-Transportation</i>	<i>Actual, Nu. 14 million</i>	<i>DoA, NSC</i>	<i>Insufficient budget release</i>	<i>Release adequate budget</i>
<i>Seedling and seedlings (promotion)</i>	<i>Free/cost sharing</i>	<i>Dzongkhag, LG</i>	<i>No clarity on cost sharing</i>	<i>Follow cost sharing modality</i>
<i>Butachlor(NPPC) Transport =</i>	<i>Actual cost 0.593m</i>	<i>DoA, NPPC</i>	<i>Fund constraint</i>	<i>Release adequate budget</i>
<i>FMCL-hiring and transport</i>	<i>20 m annually Average proportion of incentive = 56.1 % starting from 2016-17</i>	<i>DoA, FMCL</i>		<i>Refer FMCL approved rates</i>

<i>Electric fencing</i>	40 %	NPPC, Dzongkhag	<i>Maintenance and management</i>	<i>Enforce by-laws M & E</i>
<i>Pre-fabricated Green house, low poly house,</i>	80 % (groups) and 60 % (individual) for pre-fabricated and 100 % for low cost	DoA, Dzongkhag	<i>Not practical for groups, no uniform implementation</i>	<i>Refer cost sharing modality</i>
<i>Post harvest structures and equipments</i>	50 % (NPHC) , 100 % (DAMC)	NPHC	<i>No uniform standard</i>	<i>Refer cost sharing modality</i>
<i>Drip and sprinkler irrigation, storage, reservoirs</i>	100 % on purchase price and free transport until road point	DoA, Dzo. ,	<i>No full support as a package,</i>	<i>Need to support full package</i>
<i>Compost structures</i>	Structure= Nu. 15,000 or 60 %		<i>No full support as a package</i>	<i>Need to support full package like equipment</i>
<i>Machineries and equipment</i>	Free transport and installation	FMCL	<i>FMCL charges additional 15 % on the cost</i>	<i>Provide additional 15 % incentive</i>
<i>Marketing</i>	-Transport support on need basis and when budget is provided - Price gap support during market failure	DAMC	As and when budget provided and is deemed required	Budget provision for transportation, price gap between market price and cost of production, processing equipment, packaging materials, and market promotion as in the following proposed table.

	-Market Infrastructures including B-coop shops, Farm shops - Value addition equipment including packaging materials to registered groups and cooperatives			
<i>Land development</i>	CMU machines- fuel basis	Dzo.	<i>Priority for farm road construction</i>	<i>Follow land development guideline</i>
<i>Mushroom</i>	Free spawn for small scale, equipments on returnable basis	NMC	<i>No uniform support</i>	<i>Follow cost sharing modality</i>

Table 2: Livestock sector

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
Dairy	Supply of cattle -Dairy cattle/buffalo	In cash-30% of total cost (Nu: 40,000) per animal with maximum subsidy of Nu. 12,000 per animal	Administrative approval from Dzongkhag based on ministry's interim approval	Restriction on ceiling of subsidy and number of animals. Individual farmer not entitled to subsidy	Revise number of animals and maximum price ceiling based on market force

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
				Difference in subsidy package in project and non-project areas	Expand support to all categories of dairy farmers Apply uniform subsidy package across the board
	Insurance of animal for one year	In cash-20% of Nu. 40000/animal, onetime support	-do-	Nil	Insurance subsidy 20% based on the market value of animal Synchronize insurance scheme with PSL
	Expenditure during quarantine	Nu. 2000/animal to meet feeding, labour, fodder transportation and treatment costs for 15 days of quarantine period	-do-	Nu. 2000 insufficient to meet quarantine expenses for 15 days quarantine due to increasing price	Revise quarantine expenses to Nu. 3000/animal
	Construction of farm shed (construction materials, e.g.	In kind-maximum Nu. 7500/animal (30%) of 25000/animal, and maximum for 5 cows per household. Timber, stones and labour	-do-	Current subsidy is insufficient to purchase the major construction materials	Revise the cost of construction of shed throughout, using the standard specifications for different AEZs

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	cement, CGI sheet) with silo pit	contribution by beneficiary		Blanket application of subsidy irrespective of locations and type of shed design	Provide uniform construction materials in kind
	Transport of dairy animals	In kind- from point of purchase to point of delivery (100% subsidy)	-do- and as per existing government rules	Nil	Continue as usual
	Supply of breeding stock	In kind-100% free for pure Jersey, Jersey cross, Nublang, Brown Swiss, yak bull, all AI inputs including semen and LN2. Mithun bull-farmers pay Nu. 16000 (50% of cost of production of Nu. 32000)	As per ministry approval based on the availability of budget at gewog and dzongkhag level	Poor management of breeding bulls and weak progeny records	Reinstitute progeny born and bull keeper allowances to ensure proper management of breeding stock
	Support for construction of post-production facilities such	In kind- turnkey basis by the govt. as per standard design	-do-		

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	MCC, MPU, DSC, DPU (one time support only to farmers groups and cooperatives)				
	Supply of post-production equipment to equip MCC, MPU, DSC, DPU	In kind-100% subsidy but one time support only to farmers groups and cooperatives	-do-		
Piggery	Procurement of Piglets from contracted farmers and supply to farmers (for fattening) at govt. approved rates	In cash-Subsidy of Nu. 1500/piglet/farmer to contract pig breeder (total cost of piglet: Nu. 3500)	-do-	Nil	Continue as usual
	Supply of piglets for fattening and breeding from govt. farm	In kind-43% subsidy on cost of production of Nu. 3500/piglet (farmer pays Nu. 2000/piglet)	-do-	Nil	Continue as usual

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	Supply of breeding boar and gilt for breeding	In kind- 54% subsidy i.e. Nu. 6000/gilt or boar to the contract pig breeders (total cost of production is Nu. 11200/gilt or boar	-do-	Nil	Continue as usual
	Construction of animal farm shed (construction materials, e.g.; cement, CGI sheet) (Breeding farms)	In kind-maximum Nu. 30,968/sow (70% of the calculated cost of Nu. 221,000) for minimum of 5 sows per breeder	-do-	Nil	Continue as usual following the approved standard shed design
	Construction of fattening shed (construction materials, e.g.; cement, CGI sheet)	In kind- Nu. 5400/fattener (30% subsidy of Nu. 18000/fattener) for farmer with minimum of 30 fatteners	-do-	Nil	Continue as usual following the approved standard shed design
	Farm automation/feeder /drinker/	Maximum Nu. 10500/5 sow level (30% of the equivalent in kinds)		Not needed as facilities are inbuilt in the shed design	Discontinue as not implemented after approval so far

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	farrowing crate (Breeding farms)				
Poultry	Construction of layer and broiler farm shed (construction materials, e.g. cement, CGI sheet, nets, nails, electrical fittings)	In kind-Maximum Nu. 7000/100 birds (20% of the cost of maximum Nu. 35,000/farmer)	-do-	Subsidy package for construction inadequate Quality of subsidy in-kind materials are either inferior or supplier (winning bidder) supplies low quality material due to poor monitoring.	Revise subsidy package from 20 to 30% for different farm categories Quality subsidy material
	Farm equipment feeder/drinker/nest/brooders/de-beakers	In kind-Nu. 5000/100 birds (20% of the cost of maximum Nu. 25,000/farmer)	-do-	Quality of subsidy in-kind materials are either inferior or supplier (winning bidder) supplies low quality material due to poor monitoring.	Revise subsidy package from 20 to 30% for different farm categories Quality subsidy material
	Farm semi automation (labour saving device) - nipple	Nu. 10800/100 birds (20% of the cost of maximum Nu. 54,000/farmer)	-do-	Automation is very expensive and very few dealers	Continue as usual

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	drinker / pan feeder.				
	Basic equipment for clean chicken production.	In kind-maximum Nu. 15600/500 birds (20% of the cost of maximum Nu. 78,000/farmer)	-do-	Basic equipment not enough and no provision for commercial/semi-commercial	Expand subsidy for clean chicken production at commercial/semi-commercial
	Supply of layer DOC	In kind-Nu. 30/DoC (Subsidy 52% of total cost of production of Nu. 58)	-do-	High mortality due to poor management at farmers' level but blamed as poor quality of DoC	Built-in subsidy for enhanced extension supervision
	Supply of broiler DOC**	In kind-Nu. 25/DoC (Subsidy 52% of total cost of production of Nu. 48)	-do-	Nil	Built-in subsidy for enhanced extension supervision
Fish (aquaculture)	Construction of fish ponds and dyke with minimum of 500 sq m and maximum of 3 acres per farmer	Maximum Nu. 48/Sq m (1 acre=4047 Sq m), (30% of the total cost of 455,000/acre, which is Nu. 195,000)	-do-	Aquaculture below 500 sq m not supported	Provide subsidy to all categories of aquaculture farms

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	Water supply connection and inlet-outlet water ways establishment	In kind-Maximum Nu. 22/Sq m (30% of the calculated cost of Nu. 209,132/ acre, which is Nu. 89,628/acre)	-do-	Nil	Continue as usual
	Supply of fingerlings (ordinary and stunted carp) with free transportation	In kind-90% subsidy for ordinary carp fingerling (Nu. 0.5/ fingerling with total cost of production of Nu. 5/fingerling). In kind-83% subsidy for stunted carp fingerling (Nu. 1/fingerling with total cost of Nu. 6/fingerling)	-do-	Nil	Continue as usual
Fish (riverine and lake)	Trout farm establishment	In kind-construction of pond, including supply of fingerlings free of cost	Interim approval from MoAF/DoL/dzongkhag	New initiatives and less takers	Develop subsidy package for trout farming

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
	Community managed capture fisheries	In kind-100% for basic equipment for harvesting, processing and marketing	Interim approval from MoAF	New initiatives with limited resources	Develop complete subsidy package for riverine and lake fisheries
Goat farming	Supply of exotic bucks and doe for breeding	In kind-100% subsidy for individual farmers	Approval from MoAF	Nil	Develop complete subsidy package for goat farming
	Construction of animal farm shed (cement and CGI sheet)	In kind-maximum of Nu.1950/goat (30% of total cost of Nu. 6500) for maximum of 50 goats per farmer	Approval from MoAF	Construction of shed with present design is costly	Design low cost goat shed
Apiculture	Supply of basic beekeeping equipment (set) as one-time support	In kind-80% subsidy on the following. 1 set starter Nu. 4000/package with maximum 1/group member. Improved movable frame hive set-Nu. 3000/set for A.	Approval from MoAF	Subsidy only to group	Continue as usual with inclusion of support to individual farmers/institutions

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
		<p><i>mellipfera</i>& Nu. 2500/set for <i>A. cerana</i>, with maximum 5 hives /group member</p> <p>Casting machine-Nu. 78000/set with maximum 1/group of minimum 50 members/group or producing atleast 1500 kg honey/year</p> <p>Honey extractor (medium)-Nu. 35000/set maximum 1/group of minimum 50 members/group or producing at least 1500 kg honey/year.</p> <p>In kind-50% subsidy on beekeeping suit with veil, dangri type with</p>			

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
		<p>maximum/group member</p> <p>A automatic honey filler-Nu. 350,000 with maximum 1/group of minimum 50 members/group or producing at least 1500 kg honey/year</p> <p>Full subsidy for packaging bottles with caps and labels-500 nos. one-time support based on production output of more than 1000 kg/group. The cost is Nu. 25/bottle with cap and label</p> <p>100% subsidy for construction of honey extraction unit with sales counter and processing room-1</p>			

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
		unit/group with minimum of 50 members producing at least 1500 kg/year.			
Feed and fodder	Fencing materials pasture development	In kind- 60% of total cost of fencing materials such as barbed wire, u nails and wooden posts.	Approval by MoAF	Nil	Continue as usual based on packages developed for different categories of dairy farms
	Fodder conservation materials	In kind-100% subsidy on CGI sheet, plastic bags, vacuum packer, and cement for construction of silo pit.	Approval from MoAF	Nil	Continue as usual based on packages developed for different categories of dairy farms
	Inputs such as seeds, seedling and planting materials	In kind- 100% subsidy	Approval from MoAF	Nil	Continue as usual based on packages developed for different categories of dairy farms
	Fodder chopping machine	In kind- 60% subsidy	Approval from MoAF	Nil	Continue as usual based on packages developed for

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
					different categories of dairy farms
	Land development for pasture establishment	In kind-tractor free for pastureland development on fueling basis	Approval from MoAF	Not practical and sustainable	Discontinue and look for alternative
Indigenous livestock inputs	Local cattle, pig, poultry, sheep, yak	In kind-100% subsidy for conservation and development	Approval from ministry	No subsidy package for local livestock	Mainstream subsidy package for local livestock
Animal health inputs	Medicines and vaccines	In kind-100% subsidy for medicines and vaccines except in NVH	Approval from MoAF	Nil	Continue as usual
Marketing	-Value addition equipment - BCoop shop - Market facilities	In kind-100% subsidy to farmer groups and cooperatives	DAMC	No support in improving transportation of perishable livestock and dairy produce	-Regular budget provision to increase subsidy coverage - Subsidy to procure refrigerated Vans for promising groups and cooperatives

COMMODITY	SUBSIDY LEVEL		MODALITIES (GOVERNANCE- APPROVING AUTHORITY, PROPORTION)	ISSUES/GAPS/CONCERNS	INTERVENTIONS AND CHANGES REQUIRED
	List of inputs	Type of support			
Biogas	Construction of biogas plant	In cash-Nu. 11,700/plant irrespective of plant size	Approval from MoAF	Outdated costing and does not represent all dzongkhags. Subsidy is flat irrespective of plant size. Subsidy is low.	Develop different subsidy packages for different sizes of plants, with increase in subsidy amount.
Transportation of livestock supplies and inputs	Animals, medicines, vaccines, fodder seeds, machineries and equipment	In kind-100% subsidy	Approval from MoAF	Nil	Continue as usual

Table 3: Forestry Sector

Commodity	List of subsidy	Types of subsidy	Modalities (Governance- approving authority, proportion)	Issues/gaps/concerns	Interventions and changes required
NWFPS	Basic Equipment Chemicals for treatment	Kind (100 %)	Eligible only for Groups. Approved by the Department.	Project based and site specific Sustainability issue	Cost sharing basis, need based and institutionalized for

	<p>Packaging and labelling (Bottles, Plastics, labels, Record keeping books Infrastructure (Cold storage, water tank, drying house, marketing sheds, bamboo house etc.) Free Royalty for domestic consumption</p>	<p>Cost and Transportation (100 %)</p> <p>Kind (100%)</p> <p>Kind (100%) Material support</p> <p>Kind (Royalty waived off)</p>	<p>Basic equipment and infrastructure are one time.</p>	<p>Full subsidy dependent</p>	<p>replicating to other areas/groups.</p>
<p>Timber</p>	<p>Rural subsidized timber for house construction Rural subsidized timber for other purpose Renovation subsidized timber Dzong/Lhaxhang construction Chadri Timber for bridge construction in rural areas</p>	<p>Subsidized royalty rate</p>	<p>Eligible only for rural areas for construction of houses*approval by field offices of Department. For Lhaxhangs and Dzongs confirmation required from Department of Culture and Approved by Department. Disaster/bridge based on assessment from Dzongkhag administration *Exception allotment in municipal areas: If the land is inherited</p>	<p>Weak monitoring on the use of rural timber Ambiguities with respect to rural timber allotment</p>	<p>Amendment in forestry rules on rural timber (based on case study) Enhance monitoring (increase frequency)</p>

			and construction is for personal residence, subsidized timber can be availed. Procedure refer to FNCRR 2017.		
Firewood	Rural allotment free of royalty for dry and lops and tops (carried on man & animal) Royalty and permit fee for firewood transported by mechanical Truckload Cremation	Subsidized royalty (two truckloads in area without electricity and one truckload in area with electricity) 4 m ³ (3 hardwood and 1 Juniper)	Approval by Field Offices of Department on endorsement of Gup. Procedure refer to FNCRR 2017.	No issue	Continue same
Sands and Boulder (Surface collection)	Sand and Boulders for construction in rural areas Free of royalty if not transported mechanically	Subsidized royalty (not more than five truckloads in a year)	Approval from Division after endorsement of Gup.	No issue	
Integrated Conservation Development Program (ICDP)	Electric cookers CGI sheets Iron fencing posts Electric fencing Breeding bulls Poultry Piggery Apiculture Irrigation channel Biogas Solar lighting Seed and seedlings	Kind (100%) Kind (100%) Kind (100%) Material support Kind (100%) Cost sharing Cost sharing Kind (100%) Material support Kind (100%) Kind (100%) Kind (100%)	Approval by Department as per the project activities.	Project based Sustainability issue Over dependency Duplication with DoA and DoL	Need based, cost sharing basis and institutionalized (in collaboration with DoL and DoA).

	LPG with stove Support to Nature Clubs Raingears Search lights Entry Fees to Recreational	Kind (100%) Cash Kind (100%) Kind (100%) Concessional rates			
Ecotourism	Infrastructures Technical support Toilet facilities for homestays and ecotrails Nature Parks and Recreational areas Equipment (Heater, Geysers etc.)	Kind (100%) Cost sharing Kind (100%) 50:50	Approval by Department as per the project activities.	Project based Sustainability issue Lack of guidelines	Cost sharing, Guidelines, Institutionalized
Gewog Environmental Conservation Committee	Crop insurance Livestock insurance	Cash (100 % Seed money)	Approval by Department upon endorsement of Gup	Reluctant to join the group. Less compensation and reluctant to pay premium Lengthy procedure for claim. Change in committee members	Implement Compensation through the endowment fund. Mobilization of fund.

Annex 2: Hiring rate for agricultural machineries

Description	Power tiller	Tractor above 34hp	Tractor 34hp	Tractor 18hp	Paddy reaper	Combine harvester	Paddy Transplanter	Water pump	Mini tiller
Revised actual operation per day	3317.26	10648.39	7940.96	6136	3849.38	11794.53	4286.88	3056.2	3395.41
Proposed hiring rates per day	1492.77	3726.94	2779.34	2147.67	1924.69	4363.98	1286.06	2444.96	1358.16
Final rate (round off)	1500	3800	2900	2300	2200	4400	1300	2500	1300

Annex 3: Details of cost sharing modalities for Agriculture Land Development as per Agriculture Land Development Guideline 2017

Sl. No.	Particular	Cost to be borne by:	
		Beneficiary	Government
1	<i>Terracing using machine (bench, orchard & terrace consolidation) - For individuals & community/Group</i>		
	a. Machinery (plus transportation & maintenance)		✓
	b. Machine Operator (TA/DA)		✓
	c. Fuel, oil and lubricant		✓
	d. Labour & farm tools	✓	
2	<i>Terracing using machine (bench, orchard & terrace consolidation) - for institutions/private sectors (enterprises)</i>		
	a. Machinery (plus transportation & maintenance)		✓
	b. Machine Operator (TA/DA)	✓	
	c. Fuel, oil and lubricant	✓	
	d. Labour & farm tools	✓	
3	<i>Collection of excess surface stones - for individuals & community/group</i>		
	a. Machinery (plus transportation & maintenance)		✓
	b. Machine Operator (TA/DA)		✓
	c. Fuel, oil and lubricant		✓
	d. Labour & farm tools	✓	
4	<i>Collection of excess surface stones - for institutions/private sectors</i>		
	a. Machinery (plus transportation & maintenance)		✓
	b. Machine Operator (TA/DA)	✓	
	c. Fuel, oil and lubricant	✓	
	d. Labour & farm tools	✓	

5	<i>Manual terracing (fully levelled bench and orchard terraces) - for individuals & community/group</i>		
	a. Cash incentives (Nu. 15,000/ac)		✓
	b. Labour & farm tools	✓	
6	<i>Manual terracing (partially levelled bench terrace) - for individuals & community/group</i>		
	a. Cash incentives (Nu. 7,500/ac)		✓
	b. Labour & farm tools	✓	
7	<i>Alley cropping (Hedgerows) - for all proponents</i>		
	a. Cash incentives (Nu. 2,500/ac)		✓
	b. Plantation materials (fodder grass slips)		✓
	c. Transportation of planting materials		
	i. Up to road head		✓
	ii. Road head to site	✓	
	d. Labour & farm tools	✓	
8	<i>Contour stone bunds (with or without fodder grass strip) - for all proponents</i>		
	a. Cash incentives (Nu. 5,000/ac)		✓
	b. Plantation materials (if required)		✓
	c. Transportation of planting materials		
	i. Up to road head		✓
	ii. Road head to site	✓	
	d. Labour & farm tools	✓	
9	<i>Orchard basin (soil or stone) - for all proponents</i>		
	a. Cash incentives (Nu. 6,000/ac)		✓
	b. Materials (stones)	✓	
	c. Labour & farm tools	✓	
10	<i>Check dam (Log or stone check dam) - for all proponents</i>		
	a. Cash incentives (Nu. 1,500/check dam)		✓
	b. Materials (logs and stones)	✓	

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