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NATURAL RESOURCES AND ENVIRONMENT COMMITTEE

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Review Report on the RNR Marketing Policy

26th Session of the National Council

(27th November 2020)

Table of contents

Content	Page
Contents	
Committee Composition:	ii
Findings and Recommendations	iii
1. Introduction	1
2. Methodology	2
3. Major Policy Areas	3
3.1 Institutional Framework	3
3.2 Market Infrastructure	12
3.3 Market Support	14
3.3.1 Research Studies	
3.3.2 Access to Finance	15
3.3.3 Value Addition	17
3.4 Market Information	19
Deferences	20

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Finding I:

It is found that MSC has become weak by reducing the quarterly meeting to twice in the terms of reference and became non-functional for having met only once since its inception. Without MSC meeting, most of the issues related to production and marketing such as reducing the huge gap between the import and production of tomatoes and onions, increasing the yield and reducing the import quantity of apples and oranges, substituting the import of those fruits that are never exported, reducing the price difference between import and export price of apples, shelled betel nuts and ginger are left unattended. However, the Department is implementing the policy more or less independently as per the 3 years marketing action plan with some feedback from the stakeholder meetings. Moreover, some of the production and market related issues for prioritized commodities are expected to be addressed through Agriculture ECP.

Recommendation I:

The Ministry has to make the Multi Sectoral Committee functional for the effective implementation of the RNR Marketing Policy so that the marketing system is put in place by coordinating and harmonizing the approaches of all involved stakeholders. Aside Agriculture ECP work, MSC has to seriously work to address the pertinent issues like reducing the huge gap between the import and production of tomatoes and onions, increasing the yield and reducing the import quantity of apples and oranges, substituting the import of those fruits that are never exported, reducing the price difference between import and export price of apples, shelled betel nuts and ginger.

Finding II:

Various market infrastructure has been established by the Department and NPHC and most are functional though they were established independently by those agencies. Through field visits it was found that most farm shops have limited storage space, road side collection sheds have no toilet facility and only a few cold stores and other farm level stores, which could assure longer storage life of products have been established. Having learned a lesson from COVID-19 and to deliver faster and better services, the MoAF in collaboration with Thromde is establishing vegetable market sheds at appropriate locations.

During the Nationwide Lockdown because of COVID-19, people had access only to a limited quantity and variety of vegetables as the import of vegetables have been temporarily restricted. Also many locally grown products like cabbages and ginger were spoiled when the export could not be done. It confirms the limited storage and processing facilities and poor distribution channels for fresh vegetables.

Recommendation II:

To improve the distribution of fresh and quality products within the country and export, there is a need to establish smaller capacity cold stores at strategic locations facilitated by refrigerated vans and establish other low-cost farm level stores as many as possible.

Finding III:

It is observed that various market studies are carried out and uploaded on the Department's website. Some of the findings of the studies are captured in the action plans of the Department but there is no assured coordination among the stakeholders for the implementation of the findings of the studies.

Those Corporate Business Development Scheme, buy back scheme and school and hospital program have benefited the farmers but implemented based on the budget availability.

The availability of CSI banking service at Gewog Level has reduced the travel of people to the Dzongkhag and the online application has reduced the administrative burden. However, disqualification of loan application criteria as per the credit manual 2020 is not available on CSI website for the public. Also, the technical recommendation letter from the respective department has to be produced manually.

It is observed that any intervention is delayed because the Department has to collaborate with multi stakeholders especially the Department and NPHC, who are implementing the value addition as well as market infrastructure, has no direct interaction in planning since NPHC is under the DoA management. However, ECU is going to facilitate with regards to enterprise development

Recommendation III:

There is a need to establish mechanisms among the stakeholders for discussing the findings of market studies and adoption of technically feasible processed products especially enhancing stronger collaboration between NPHC and DAMC.

Also, the Government has to continuously support the existing financial schemes with sufficient budget and good public awareness. Further, CSI bank has to upload the disqualification of loan application criteria on the website and need to work for providing the technical recommendation letters from the respective department electronically.

Finding IV:

Agriculture Marketing Information System (AMIS) is accessible through an online system as well as mobile apps. The online system has real-time prices of 37 commodities located in 23 markets across the country. It will also have information on the latest auction market prices linked through the Food Corporation of Bhutan. However, there is no information on the quantity of products required by the market and the public are not aware of AMIS.

Recommendation IV:

To have better information, it is good to incorporate the estimated quantity of products required per market in the AMIS and also display it on TV screens in the Market. If possible, the estimated quantity, location of the products and cost of production needed to be incorporated in AMIS. Further public awareness on AMIS has to be carried out.

1. Introduction

The Renewable Natural Resources (RNR) Sector which comprises Agriculture, Livestock and Forestry plays a significant role in terms of employment and revenue generation in the country. The sector employed 51.1 % (Labour Force Survey Report, 2019) of the total population and contributed 17.37% to the total GDP of the country in the year 2017 (National Statistical Year Book, 2019). The aggressive development of this sector from production to marketing is critical towards achieving the food self-sufficiency but 53.02% of the agriculture holding is used only for the production of own consumption and some sales which conforms to the existence of predominantly subsistence oriented farming (RNR census 2019).

The RNR marketing policy of Bhutan was adopted in 2018 mainly to facilitate the transformation of current subsistence farming into commercial. The policy was approved during the 151st sitting of the *Lhengye Zhungtshog* on February 13, 2018. The six major policy objectives are to:

- 1. Strengthen the policy environment and institutional framework
- 2. Enhance RNR product value addition
- 3. Strengthen RNR marketing infrastructure
- 4. Enhance access to RNR marketing finance
- 5. Enhance RNR commodity marketing
- 6. Strengthen RNR marketing information and risk management.

The policy is backed up in 12 FYP with a sizable budget. In 12 FYP, the RNR sector has allocated the budget of Nu. 269 million for the value chain and enterprise development program, which is 8.8% of the total RNR sector budget. The program has to be spearheaded by the Department of Agriculture Marketing and Cooperatives (DAMC). The expected contributions towards the achievement of Agency Key Result Area (AKRA) by implementing this program are:

- 1. Enhanced RNR marketing and value chain by establishing 15 commodity value chains for RNR products with an increase of 150%, trading domestically 32388 MT volume of RNR products with an increase of 32%, establishing 20 RNR based enterprises.
- 2. Increased non hydro revenue and GDP over plan period by exporting 3050 MT of RNR products annually with an increase of 15%
- 3. Created Jobs by employing 6600 persons in RBR sector with an increase of 69%

Although RNR marketing policy is in place and the implementation is going on, there are challenges that impede the operation and performance of the RNR sector in terms of the marketing of products. There are various marketing issues reported in print media, broadcast through Bhutan Broadcasting Service and even reported by Hon'ble members during the plenary sessions based on their constituency visits. Further, there are no stable local markets for off season vegetables, cereal crops like maize, buckwheat and cash crops like cabbages and ginger and also no suitable

export market for cardamom, apples, and oranges. Further, the trend of imports and exports value of RNR products are diverging rather than converging where imports are on increasing trend and the exports are in decreasing trend (Bhutan Trade Statistics Report, 2016, 2017, 2018).

Because of marketing problems, the commercial production of the RNR products couldn't be undertaken aggressively by the farmers and it is a serious concern. Therefore, to uphold the legal mandate of the National Council as enshrined on the Article 10.2 and 11.2 of the Constitution of Kingdom of Bhutan and Section 7 and 10 of the National Council Act, the review of the policy was carried out to have comprehensive understanding of the policy, implementation status and its effectiveness. The National Council assigned this policy review work to the Natural Resources and Environment Committee (NREC) on 25th November 2019 and the Committee presented the interim review report of the policy on 24th Session of the National Council where the House provided the suggestion for improving the final report.

In the subsequent report, the approaches followed while reviewing and the report analysis was captured under the following major policy areas namely enabling environment, market infrastructure, market support and market information followed by some findings and recommendation.

2. Methodology

The approaches followed for the review are:

- 1. Seeking presentation on the RNR Marketing Policy and Strategies from the Ministry of Agriculture and Forests
- 2. Performing comprehensive desk review work
- 3. Arranging consultation meetings with relevant stakeholders
- 4. Making necessary field visits

The stakeholders consulted are Department of Agriculture Marketing & Co-operatives (DAMC), Department of Agriculture (DoA), Department of Livestock (DoL), Department of Forests & Park Services (DoFPS), Bhutan Agriculture and Food Regulatory Authority (BAFRA), Centenary Farmers Market (CFM), Food Corporation of Bhutan Limited (FCBL), National Post Harvest Center (NHPC), National CSI Development Bank Limited (NCSIDBL) and Royal Securities Exchange of Bhutan Limited (RSEBL).

Apart from seeking consultations with the relevant agencies, the committee also made field visits to farm shop sites in Zhemgang, Dagana and Pemagatshel Dzongkhags and FCBL (Phuntsholing) to have a comprehensive understanding of the implementation of buyback programs. Also, a field visit was done at NPHC to understand the cold storage facility and processing of value-added products.

3. Major Policy Areas

The following are the major areas for the implementation of the policies:

3.1 Institutional Framework

As per the policy, the Ministry has established a MSC shown in Figure 1 headed by the Secretary of MoAF to put the RNR marketing system in place by coordinating and harmonizing the approaches of all involved stakeholders. The member secretary of the Committee is DAMC. Despite quarterly meeting requirements in the policy, the Committee has decided to meet twice a year as per the Terms of Reference (ToR) of the Committee. So far, the MSC has met only once and the following meetings could not be held because of the difficulty of getting the common convenience to hold a meeting. The department felt that MSC is receiving lesser importance as other relevant agencies are deputing junior level representatives as Committee members who cannot take the concrete decision.

The broad marketing strategy paper which includes 3 years action plans developed by DAMC was endorsed during the MSC meeting and the progress reporting was agreed quarterly as per the existing reporting mechanism where a system of quarterly progress reporting has been done in the Government Performance Management System.

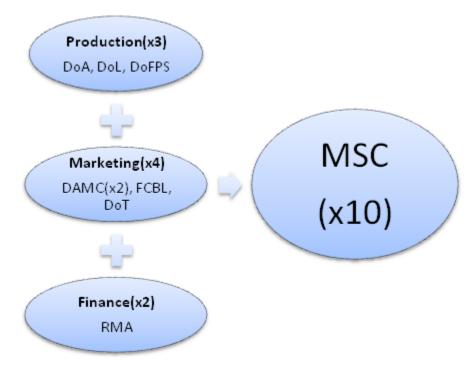


Figure 1. MSC Composition

However, the DAMC is well structured to implement the policy and 3 years action plan as shown in Figure 2. The current staff of 36 led by the Director General is providing the required marketing services in the country (DAMC Annual Report, 2017-18). As per the policy, the Ministry has completed the organization development exercise of the Department in order to enhance the delivery of effective marketing services. The Department has completed two rounds of meetings among the stakeholders and the major outcome from the meetings was to hold stakeholder meetings twice a year where they can share the work plans and come up with appropriate measures to address the pressing marketing issues. According to implementation status of their Action Plan, they have instituted a Marketing Stakeholders Forum to discuss and enhance the coordination of stakeholders.



Figure 2: Structure of DAMC

Had MSC been active as per ToR, the several production and marketing issues could have been addressed, for examples:

- 1. How to reduce the huge gap between the import and production of tomatoes and onions? (Figure 3)
- 2. How to increase the yield and reduce the import quantity of apples and oranges? (Figure 4 and Figure 5)
- 3. How to substitute the import of those fruits that are never exported? (Figure 6)

4. How to reduce the price difference of import and export of apples, shelled betel nuts and ginger? (Figure 7)

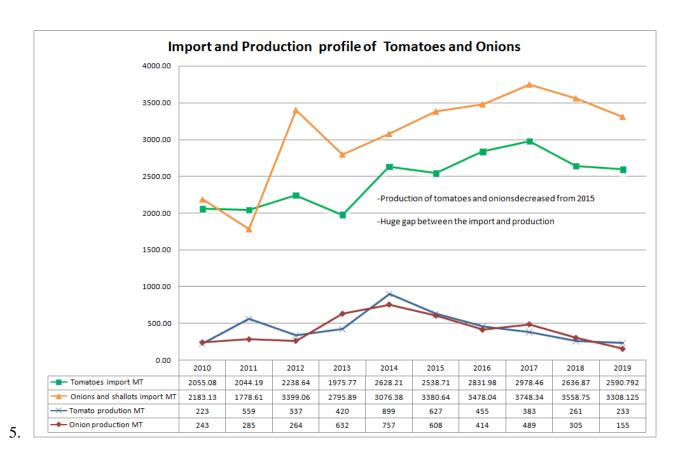


Figure 3. Import and production profile of Tomatoes and Onions (Source: Bhutan Trade Statistics (BTS), Ministry of Finance (MoF))

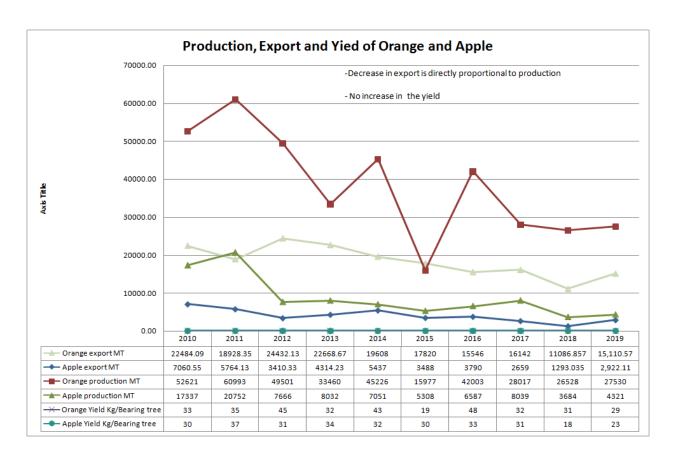


Figure 4. Production, export and yield of orange and apple (BTS, MoF)

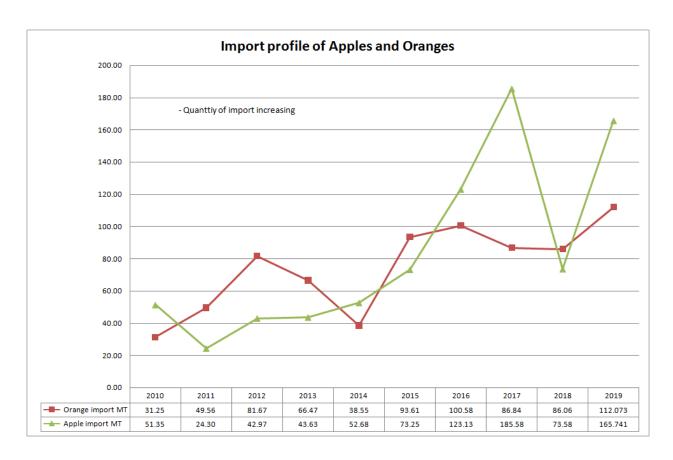


Figure 5. Import profile of apples and oranges (BTS,MoF)

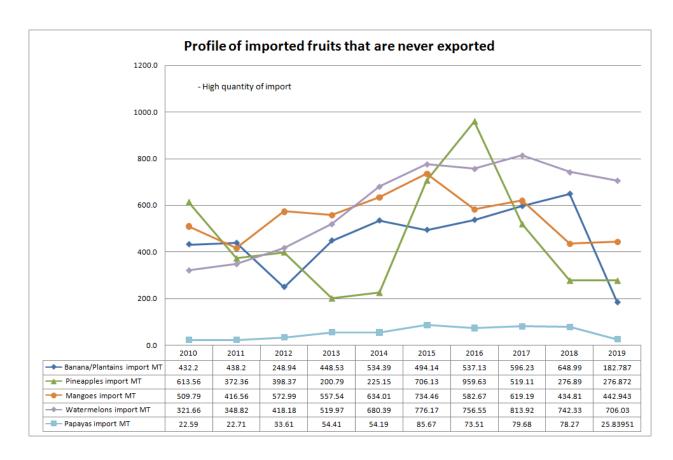


Figure 6. Profile of imported fruits that are never exported (BTS, MoF)



Figure 7. Price difference of import and export price (BTS,MoF)

Nevertheless, some of the production and market issues for prioritized commodities can be addressed through the Agriculture program under Economy Contingency Plan (ECP) 2020 shown in self-explanatory Figure 8 and Figure 9. The prioritized crops under cereal are Maize, Buckwheat and Wheat. The prioritized crops under vegetables are Chili, Onion, Tomato, Brinjal, Cauliflower and Beans.

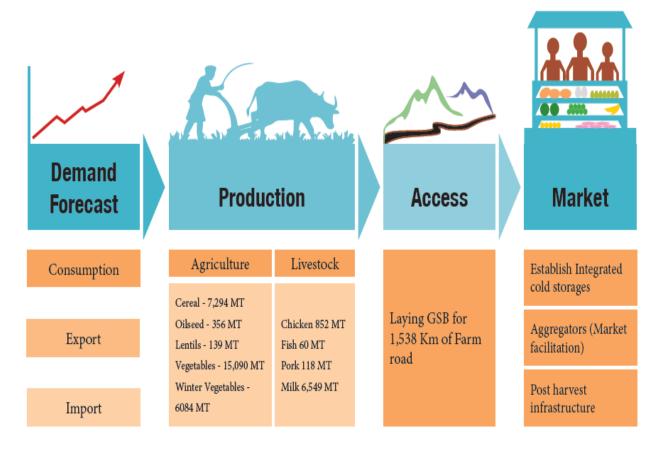


Figure 8. Agriculture ECP

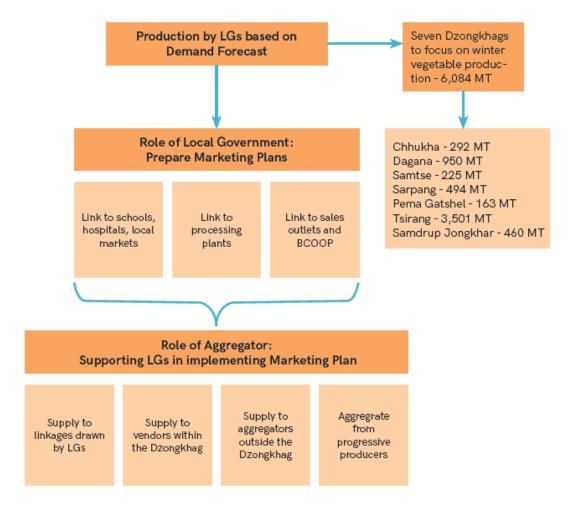


Figure 9. Agriculture ECP Market Strategy

It is found that MSC has become weak by reducing the quarterly meeting to twice in the terms of reference and became nonfunctional for having met only once since its inception. Without MSC meeting, most of the issues related to production and marketing such as reducing the huge gap between the import and production of tomatoes and onions, increasing the yield and reducing the import quantity of apples and oranges, substituting the import of those fruits that are never exported, reducing the price difference between import and export price of apples, shelled betel nuts and ginger are left unattended. However, the Department is implementing the policy more or less independently as per the 3 years marketing action plan with some feedback from the stakeholder meetings. Moreover, some of the production and market related issues for prioritized commodities are expected to be addressed through Agriculture ECP.

Recommendation I

The Ministry has to make the Multi Sectoral Committee functional for the effective implementation of the RNR Marketing Policy so that the marketing system is put in place by coordinating and harmonizing the approaches of all involved stakeholders. Aside Agriculture ECP work, MSC has to seriously work to address the pertinent issues like reducing the huge gap between the import and production of tomatoes and onions, increasing the yield and reducing the import quantity of apples and oranges, substituting the import of those fruits that are never exported, reducing the price difference between import and export price of apples, shelled betel nuts and ginger.

3.2 Market Infrastructure

After the Market Infrastructure Inventory study in 2016 as shown in Table 1, the Department has developed the guideline in 2018 for establishment of marketing infrastructure such as cold store, naturally ventilated store, large market, roadside market, farm shop, cooperative shop, sales outlet, pack house, warehouse and disseminated it to relevant stakeholders. The guideline defines the working system of various marketing infrastructure and procedures for the establishment. The Department in collaboration with Local Government monitors the utilization of the infrastructure. The Department has established additional 13 market infrastructures so far.

Table 1. Market Infrastructure Inventory (2016, DAMC)

		Types of Infrastructure								
SI. No.	Dzongkhag	Collection shed	Field Pack House	Farm Shop	RNR Market Shed	RNR Sales Outlet	Produce Store	Other Sheds ¹	Total by Dzongkhag	
1	Bumthang	0	0	1	1	3	0	0	5	
2	Chukha	6	0	2	0	16	6	0	30	
3	Dagana	2	1	4	1	3	0	0	11	
4	Gasa	0	0	3	2	2	0	0	7	
5	Haa	10	0	2	1	1	0	0	14	
6	Lhuentse	2	0	7	3	1	2	1	16	
7	Mongar	12	0	7	8	14	0	12	53	
8	Paro	1	0	0	2	3	0	0	6	
9	Pemagatshel	1	0	9	4	3	1	11	29	
10	Punakha	6	0	4	1	10	0	0	21	
11	Samdrupjongkhar	12	0	4	4	2	4	9	35	
12	Samtse	0	0	0	5	1	0	3	9	
13	Sarpang	6	0	3	2	0	0	1	12	
14	Thimphu	0	0	0	2	17	0	3	22	
15	Trashigang	49	0	7	9	3	8	46	122	
16	Trashiyangtse	7	0	7	2	3	1	4	24	
17	Trongsa	2	0	0	1	1	0	1	5	
18	Tsirang	0	0	0	1	5	0	0	6	
19	Wangduephodrang	4	3	4	5	1	0	0	17	
20	Zhemgang	2	0	6	1	0	0	0	9	
Total Type	in the country by	122	4	70	55	89	22	91	453	

1. Other Shed includes B-Coop Shops, MPU/Milk booth, processing sheds, deseeding machine house, cooling chamber, livestock outlets/meat shops

To have a better understanding of the roadside market shed, the committee visited the road side market sheds along the Paro and Punakha Highway with a short questionnaire It was found there are 91 roadside market sheds where 52 are operational on that particular day. From the randomly interviewed 24 sheds, it was found that most of the sheds are used throughout the whole season and only local products are sold. It was also found that only 9 sheds are temporary and privately owned. There are only 7 permanent sheds with water and toilet facilities charging monthly rent payment of Nu 500 and 900.

In addition, there are following storage and processing facilities set up by National Post Harvest Centre (NPHC) under the DoA to facilitate market (Royal Audit Authority's Performance Audit Report on Food Self-Sufficiency and Security 2019):

- 1. Five Cold stores with a total of around 300 MT capacity at National Post Harvest Centre (Paro), Lingmathang (Mongar), Sisina (Thimphu) for multi storage purpose including private cold stores at Tsendo (Paro) and Babesa (Thimphu).
- 2. Four Zero energy cold stores with a 25MT capacity each at Jesigang (Paro) attached with Integrated Food Processing Plants (IFPPS)
- 3. 1072 ambient stores with a capitu of I MT each for storage of maize and potato seed stores in the farmers' field
- 4. 42 units of onion curing cum store in the farmers' field

There are 4 auction yards facilitating market auctioning of commodities at different regions like Samdrup Jongkhar, Gelephu, Samtse, and Phuentsholing, 17 warehouses, 11 chambers of cold stores (FCB Annual Report 2018). Further, some auction yards are equipped with packing and grading equipment for potato and oranges. Also, there is one additional private auction yard at Phuntsholing.

Currently, Centenary Farmers Market (CFM) is operating at one fourths capacity to minimize gathering because of COVID 19 and Thimphu Thromde is in the process of constructing vegetable market sheds at appropriate locations.

Various market infrastructure has been established by the Department and NPHC and most are functional though they were established independently by those agencies. Through field visits it was found that most farm shops have limited storage space, road side collection sheds have no toilet facility and only a few cold stores and other farm level stores, which could assure longer storage life of products have been established. Having learned a lesson from COVID-19 and to deliver faster and better services, the MoAF in collaboration with Thromde is establishing vegetable market sheds at appropriate locations.

During the Nationwide Lockdown because of COVID-19, people had access only to a limited quantity and variety of vegetables as the import of vegetables have been temporarily restricted. Also many locally grown products like cabbages and ginger were spoiled when the export could not be done. It confirms the limited storage and processing facilities and poor distribution channels for fresh vegetables.

Recommendation II

To improve the distribution of fresh and quality products within the country and export, there is a need to establish smaller capacity cold stores at strategic locations facilitated by refrigerated vans and establish other low-cost farm level stores as many as possible.

3.3 Market Support

The following are the market support provided by the Department are:

3.3.1 Research Studies

Some of the major market studies and some research findings are:

- 1. Bhutanese products cannot compete with the cheap products flooding the Guwahati market from Megalaya in the same season.
- 2. Commonly grown Bhutanese black cardamom has no demand in the Middle East Countries.
- 3. Quality dairy products demanded by two airlines have been captured by Kofuku International Limited (KIL) established at Trashigang.
- 4. Huge market of 70-80MT a day for maize or broken rice at Nu 15/kg in Bhutan Centennial Distillery, Samtenling.
- 5. Potential domestic market for the spices apart Cardamom and Ginger since they are imported more than the export.
- 6. Potential domestic market for dairy products since milk and milk products are imported in large quantities from India.
- 7. Potential export market for Potato in Nepal since 50% of the potato exported to India goes to Nepal.
- 8. Bhutanese vegetables cannot compete with Indian vegetables due to high cost of production.
- 9. Requirement of appropriate post-harvest infrastructure in strategic location to minimize the loss.
- 10. Requirement for the certification and standards for the export of produce.

11. Various recommendations from production to marketing in the value chain analysis for potato, citrus, honey and dairy products.

It is observed that various market studies are carried out and uploaded on the Department's website. Some of the findings of the studies are captured in the action plans of the Department but there is no assured coordination among the stakeholders for the implementation of the findings of the studies.

3.3.2 Access to Finance

Some of the access to finance are:

- 1. The Cooperative Business Development Scheme (Co-BuDS), a cost sharing scheme for supporting the purchase of value addition equipment by the farmers groups and Cooperatives for the initial startup. So far 19 farmer groups /Cooperatives have availed this service.
- 2. Buy back Scheme where the products are purchased by FCBL at a minimum set price where there is no market. It is operated through farm shops and so far, the total quantity of eight farm produces (ginger, garlic, cabbage, maize, paddy, peas, cardamom, quinoa) purchased was 153.768 MT and its corresponding value is Nu. 33.08 million as shown in Figure 10.

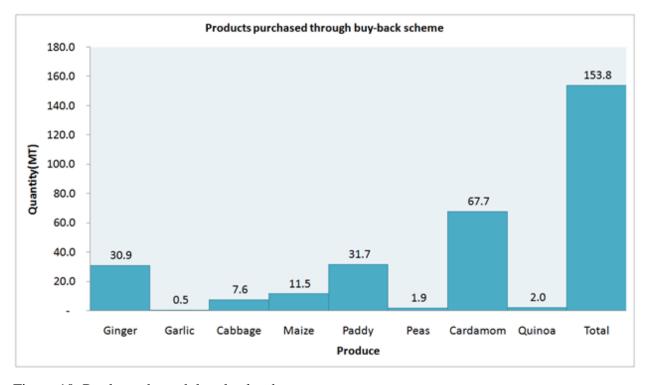


Figure 10. Products through buy back scheme

3. School and Hospital Feeding Program (SHFP) where the locally produced products are sold to schools and hospitals at market price. As shown in Figure 11, individual farmers/farmer groups/cooperatives will receive preferential treatment in supplying their produce to the schools and hospitals, FMCL and BLCL will supplement produce whenever supplies are running short. FCBL will undertake procurement (buy-back) from FMCL and BLCL and distribute the resources to schools and hospitals wherever direct connections between the supplier and the recipient is not possible. FCBL will continue to import and supplement the supply/distribution of all food resources that are locally not available.

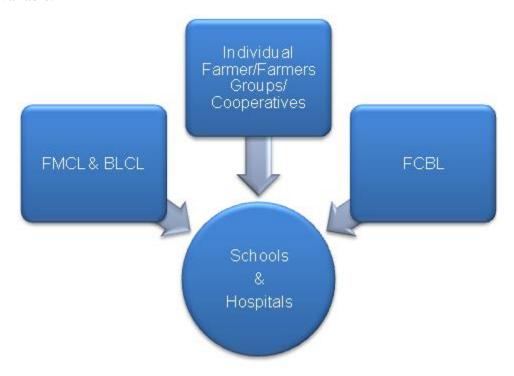


Figure 11. Operation Mechanism of SHFP

Those Corporate Business Development Scheme, buy back scheme and school and hospital program have benefited the farmers but implemented based on the budget availability.

Moreover, various low interest 5 types of loan services from Cottage and Small Industry (CSI) Bank and 2 types of Priority Sector Lending (PSL) from other Banks facilitated the credit services.

CSI banking services have extended at Gewog level through their 201 Community banking services. The loan application can be filed through online and loan gestation period to a maximum of 2 years. The applicant has to get a technical recommendation letter from the respective Departments. The turnaround time for Non-Formal Rural Loan is 5 days and 20 days for the other loans. With regards to disqualification of loan application criteria, the application gets

disqualified temporarily keeping it under cooling period of 6 months if there is a bad credit information record and gets disqualified permanently if not improved during cooling period. CSI management is in the process of improving the service delivery.

PSL loan applications are filed to Dzongkhag and the PSL Committee has to complete the assessment of the proposal within 15 days and once approved by the Committee it goes to the Banks for approval within 30 days.

The availability of CSI banking service at Gewog Level has reduced the travel of people to the Dzongkhag and the online application has reduced the administrative burden. However, disqualification of loan application criteria as per the credit manual 2020 is not available on CSI website for the public. Also, the technical recommendation letter from the respective department has to be produced manually.

3.3.3 Value Addition

To enhance value addition of the RNR products, the Department in collaboration with stakeholders have done the following activities:

- 1. Business linkages established between the producers and potential local markets through participation in the CSI Fair, India International Trade Fair, and export coordination meetings.
- 2. Local assurance certification is in the stage of implementation under the Organic Flagship Programme. Organic growers have started registering their products and the list was sent to Yusipang Research and Development Center and all the processes are put in place.
- 3. Harmonization of common quality standards for products is complete under Cottage and Small-Scale Industries flagship program. Facilitations for certification of products are ongoing and the package information lists on various types of grading and packing equipment are developed and are currently in use.
- 4. E-auctioning of potato was carried out simultaneously with conventional auctioning with the support from Royal Securities Exchange of Bhutan Limited (RSEBL) where the farmers receive the payment within two days compared to two weeks in conventional auctioning
- 5. Group formation training and awareness is ongoing based on the requests from interested farmers and Extension officials and so far, there are 86 cooperatives and 596 farmers groups registered. Various RNR marketing training have been continuously provided to all the members of the farmers group and cooperatives.
- 6. Policy awareness created on BBS and radio through panel discussions, talk shows, announcements, etc. Capacity building of staff and relevant stakeholders on book keeping is continuously being done

- 7. Developed guidelines for RNR enterprise 2019 and RNR Enterprise Promotion Concept Paper focusing on commercialization (output based) outlining various types of schemes and its modus operandi and is in implementation.
- 8. The Department of Forest and Park Services has drafted a compensation policy for the loss of livestock to wild animals and it was submitted to the Cabinet for endorsement.
- 9. The Ministry is planning to do Geographical indication for the Cardamom to bring the production to a higher level depending on the market availability and also exploring the suitability of Green or Black cardamom production within the country.

In addition, NPHC has developed many processed products (Figure 12) and disseminated the technology to the farmers and cooperatives. However, only limited local processed products are available in the market.









Figure 12. Processed Products

Furthermore, RNR Enterprise Coordination Unit (RNR-ECU) supports product aggregation and value addition and enterprise development in the rural areas by facilitating the smooth implementation of enterprise development in collaboration with different stakeholders within and beyond MoAF.

It is observed that any intervention is delayed because the Department has to collaborate with multi stakeholders especially the NPHC, implementing the value addition as well as market infrastructure, has no direct interaction in planning since NPHC is under the DoA management. However, ECU is going to facilitate with regards to enterprise development

Recommendation III

There is a need to establish mechanisms among the stakeholders for discussing the findings of market studies and adoption of technically feasible processed products especially enhancing stronger collaboration between NPHC and DAMC.

Also, the Government has to continuously support the existing financial schemes with sufficient budget and good public awareness. Further, CSI bank has to upload the disqualification of loan application criteria on the website and need to work for providing the technical recommendation letters from the respective department electronically.

3.4 Market Information

The Department developed the Agricultural Market Information System (AMIS) and is in use by the Bhutanese agricultural producers. AMIS is accessible through an online system as well as mobile apps. The online system has real-time prices of 37 commodities located in 23 markets across the country. It will also have information on the latest auction market prices linked through the Food Corporation of Bhutan. However, there is no information on the quantity of products required by the market and the public are not aware of AMIS. Also the annual production per Gewog and the cost of production of commodities are published by the DoA though not incorporated in the AMIS.

Recommendation IV

To have better information, it is good to incorporate the estimated quantity of products required per market in the AMIS and also display it on TV screens in the Market. If possible, the estimated quantity, location of the products and cost of production needed to be incorporated in AMIS. Further public awareness on AMIS has to be carried out.

References

- 1. The RNR Marketing Policy of Bhutan, 2018
- 2. Broad marketing strategy paper with 3 years action plan, DAMC
- 3. Labour Force Survey Report, 2018, Ministry of Labour and Human Resources or National Statistical Bureau of Bhutan.
- 4. National Statistical Year Book, 2019, National Statistical Bureau of Bhutan
- 5. RNR Census 2019, MoAF
- 6. 12FYP document
- 7. Minutes of the 1st Multi-Sectoral Committee Meeting, 14th Sept 2019
- 8. Minutes of the Natural Resource and Environment Committee meeting, 6th Dec 2019
- 9. DAMC Annual Report 2017-18
- 10. Concept and Operation of Farm Shops, 15th March 2015, Cabinet's letter to Ministry of Agriculture and Forests
- 11. Buy-back Implementation Modalities for Farm Shops operated by FCBL 8th March 2016, Ministry of Agriculture and Forests
- 12. Executive Orders of the Minister for the Implementation of Buy-back Program by Farm Shops for year 2017, 2018 and 2019, Ministry of Agriculture and Forests
- 13. Output on Buy-back Price Determination Workshop for 2019 at Paro, 16th & 17th January 2019
- 14. Requesting letter to Ministry of Finance on OverDraft Facility Enhancement for Buy-back of Cardamom and other produces, 14th February 2019, Ministry of Agriculture and Forests
- 15. Letter to Dzongkhags on Procurement of Cardamom within a price range of Nu. 400 to 470 per kg, 1st October 2019, Food Corporation of Bhutan Limited.
- 16. Notifications by Dzongkhag Administrations on Cardamom Auction Schedule after having received price from Food Corporation of Bhutan Limited
- 17. Presentation on the Implementation Status of Buy-back Program, 29th August 2019, Department of Agriculture and Cooperatives
- 18. Presentation slides of Dagana Dzongkhag, Zhemgang Dzongkhag, Pemagatshel Dzongkhag and Food Corporation of Bhutan Limited during field visits, 14th to 21st September 2019
- 19. Memorandum of Understanding signed between Food Corporation of Bhutan Limited and Ministry of Agriculture and Forests, 27th August 2015, www. moaf.gov.bt
- 20. White paper on the School and Hospital Feeding Program, July 2019, Ministry of Agriculture and Forests
- 21. Press Release on School and Hospital Feeding Program, 20th September 2019
- 22. Cardamom- a rapid market appraisal September 2017, DAMC
- 23. Annual Report 2018, Food Corporation of Bhutan.
- 24. Detailed Feasibility Report. Fruit & Vegetable Cleaning, Grading and Packaging Unit in conformity with The Royal Government of Bhutan's Vision of Achieving Economic Self Reliance June 2015, Ministry of Economic Affairs, Royal Government of Bhutan

- 25. Centenary Farmers Market Management Rules and Regulations' in November, 2009, BAFRA
- 26. Performance Audit Report on Food Self-Sufficiency & Security 2019, Royal Audit Authority
- 27. Annual Report 2018, FCBL
- 28. Economy Contingency Plan 2020, Royal Government of Bhutan, PMO Bhutan