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The impact of trade liberalization on agriculture in Bhutan

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Abstract

Bhutan is in the process of accession to the WTO and also takes part in several regional free trade agreements. It is one of the most mountainous countries in the world, which has big implications for its agriculture, both in terms of production as well as in terms of the marketing of its products. Generally spoken, productivity is relatively low compared to its neighbouring countries and that brings up the question whether its agriculture will be able to compete with the cheaper imports, which often follow trade liberalisation.

However, further trade liberalisation is not likely to effect Bhutanese agriculture substantively, as its agricultural markets has been practically liberalised since 1949, when the country signed a free trade agreement with its big neighbour India. Bhutan started opening up to outside world in the nineteen sixties, when it became a member of the UN, and the first roads were built. Eversince its agriculture started developing from complete subsistence oriented, towards more market oriented systems, it had only little protection, besides the country's topography and small market, which adds considerable transport costs to everything imported.

The fact that Bhutanese agriculture has its current low productivity level, is partly a consequence of the absence of adequate protection of its agricultural markets. Other factors are the unfavourable natural environment, its poor production and marketing infrastructure and the slow pace of modernisation by farmers. Bhutanese agriculture is not fully taking advantage of the market offered by its growing urban population. Despite the fact that Bhutanese consumers prefer domestically produced agricultural products, only a part of the consumers is willing to pay the price, which is relatively high compared to Indian import products. However, to generate more cash income, Bhutanese farmers have adopted cultivation of various cash crops, which are exported, mostly to India and Bangladesh. The most important cash crops are mandarins, apples, cardamom and potatoes, for which production the country has a suitable natural circumstances.

For a country with a high percentage of rural population, it is extremely important to raise rural incomes. Agricultural development will stimulate general economic development in many ways. To ensure this the country should put more efforts to strengthen its current agricultural export markets. It could profit even much more from its suitable natural circumstances for the production of these crops, if it would improve the marketing and production. Secondly it should stimulate the production and marketing of the domestically consumed products and force import substitution. Finally it should identify new potential export products, for export to neighbouring countries, as well as Western countries. These products should be high value niche products. The country has a potential for the production of these kinds of products, lying in its exceptional environmental circumstances and the relatively clean production (low use of agrochemicals). Niche products to be identified could lie in the range of medicinal plants, organically produced products, floricultural products, incense and mushrooms. To make a success out of these products, very professional efforts should be made, again both in terms of production and marketing.

1. Introduction

Bhutan is a small country in the central Himalayas, landlocked between India and the Tibetan region of China. The country is extremely mountainous, with altitude ranging from 200 to 7500 meters above sea level. The population comprised about 851.000 people in the year 2002 and grew on average 2,8 per cent over the years 2000-2002.(World Bank). The country is classified as a Least Developed Country (LDC) by the United Nations. Countries are classified as such, if they have a low national income, weak human assets and a high economic vulnerability. (UNCTAD) The South Asian country is a net food importer and the vast majority of its population lives in rural areas. As the country is about to become a member of WTO it is interesting to investigate what consequences that will have for its agriculture. The country is also taking part in several regional and bilateral trade agreements; hence the research subject was defined:

The impact of trade liberalization on agriculture in Bhutan

In the next chapter, an overview will be given about the general economic developments in Bhutan. Chapter 3 will focus the Bhutanese agriculture, its developments and policies. Chapter 4 will describe on the impact of trade liberalization on Bhutanese agriculture and in the last chapter recommendations are defined.

2. General economics of Bhutan

The balance of payments is composed as following:

Balance of payments of Bhutan 97/98 – 00/01, in millions of Ngultrums

Income	97/98	98/99	99/00	00/01	Outgoing	97/98	98/99	99/00	00/01
Exports	4274.18	4460	4987.86	5207.3	Imports	5226.10	6988.43	8074.72	9986.0
Services & transfer receipts	1734.6	1912.38	2289.06	3453.0	Services & transfer payments	2570.19	3733.35	4733.54	4492.2
Foreign aid	3538.21	6757.19	7353.12	7320.7	Errors and omissions	81.82	272.39	233.18	378.8
Total	9591	13186	14733	15981	Total	7988	11110	13184	14875
					Positive balance	1741.97	1882.47	1588.6	1124

Source: Central Statistical Organization, 2003

Table above shows that foreign aid is needed to pay for high imports of products and services, compared to exports. Looking at the development of imports and exports (products and services) over the last years, the gap between these two seems to getting bigger. Consequently the overall balance is becoming less positive over the last years. Bhutan's biggest export product is hydro power, which comprised 47 % of Bhutan's exports in the year 2000. (calculated, Wangyal)

The overall positive balance of payments enables the country, also in previous years, has enabled the country to build up foreign currency reserves. These reserves consisted in 217,20 million US dollar and Indian rupees (not convertible) for a value of 77 million US dollar for the year 2000/2001. (Central Statistical Organization, 2003) This is quite a healthy reserve.

The Gross Domestic Product (GDP) of the country (in current \$) was \$ 591,2 million in 2002, which means the GDP per capita was \$ 695,- in that year.(World Bank) Next table shows the sector composition of GDP in a few selected years.

Composition of GDP in Bhutan in 1980, 1990 and 2001 in percentages

	Primary	Secondary	Tertiary
1980	57	11	32
1990	44	24	32
2001	36	33	31

Source: National Accounts Statistics, 2002

The figures show a sharp decrease of the importance of the primary sector and a sharp increase for the secondary sector. The share of the tertiary sector stays more or less the same.

Many people are moving from the rural areas to the cities, trying to find work in the secondary or tertiary sector. Especially young people do not want to work on the farm anymore. Education plays an important role in this process. As education enrollment has increased significantly over the past decades, more and more people become well educated. These people often want to get a job, which they feel, fits better to their qualifications and so they move to the city. The tertiary sector is the most popular sector, especially government services. Working in government service means a high status in Bhutanese society.

In the secondary sector, the construction sector had the biggest GDP contribution in the year 2001, 12,1%, closely followed by the electricity and gas sector, 10,2% (Central Statistical Organization, 2002) The electricity part is the most important part of the latter. Due to its

geography, Bhutan has big potential for the production of hydropower, which has been used only partly, so far. The big share of the construction sector is a consequence of the big hydro power projects. The construction of hydropower stations is always accompanied by big investments. A big part of the electricity productions is being sold to India, which can be seen as an unlimited market for energy. Currently “Chhukha Hydropower Project” is the biggest energy producing unit, but two big hydropower projects, currently still under construction, will in future largely exceed the current production.

Another important spin-off from the hydropower production, besides the effect on the construction, is on big energy consuming industries. Because of hydropower production, prices for electricity are very low, compared to other countries. This has a stimulating effect on certain industries, in which energy forms an important part of the cost price. Examples of such industries, prevailing in Bhutan are calcium carbide and ferrosilicon. Practically the complete production of these companies is exported to India, which proves that these industries can compete well with Indian companies. However, trade liberalization between India and China has made that Bhutanese products now have to compete with cheap products from China. In China power is also relatively cheap, though not as cheap as in Bhutan

An important sub-sector within the tertiary sector, in terms of earning of foreign currency, is the tourism sector. Bhutan is trying to earn a lot of money with a low number of tourists. High daily allowances have to be paid, in order to obtain the required tourist visas. In the year 2001 only 6393 tourists came to Bhutan, but this amount contributed for about 5 % of the total exports, services and transfer receipts (calculated, Central Statistical Organization, 2003). The number of tourists slowly increased over the last years.

3. Bhutanese agriculture

3.1 Production systems

As said before there is a big variation of altitudes within the country. Consequently, there are big differences in the nature of farming systems throughout the country. Most farms in Bhutan are still subsistence oriented and they are practising integrated farming systems. This means that these farming systems always consist in a variety of both, agricultural and livestock elements. However, the composition of these different elements in the farming systems varies dramatically over the country, and even from village to village.

Up to altitudes of ca. 2500 meters paddy cultivation is practised, rice is the main staple food of Bhutan's population. In the east of the country maize used to be the main staple food crop, but it is now being replaced by rice. Maize is still grown, but it is mostly used for the production of local wine. Residues and leftovers are mainly used as cattle feed. In the higher altitude area, where paddy cultivation is not possible, buckwheat used to be the main staple food, but also here it has been replaced by rice. Buckwheat is still grown, but not on the same scale as it used to be. Nowadays a big deal of the arable land in these areas is being used for potato cultivation. Vegetables and spices are grown everywhere, but the kinds, which are grown, differ again considerably throughout the country. Some important vegetables and spices are chillies (which are consumed like vegetables in Bhutan), green leaves, turnip, radish, onion and cardamom. Fruits are increasingly grown in Bhutan as well. Apple orchards are seen in higher altitude areas (ca. 2000-3000 meters above sea level), mostly in the west and citrus fruits are grown in lower altitudes, mostly in the southern regions. In these areas cardamom is also an important agricultural product.

Cattle are the most predominant livestock element in Bhutanese farming systems and are kept by the majority of the farmers, throughout Bhutan. Farmers in higher altitude areas used to migrate with their cattle during the winter to lower areas, because of the low fodder availability, during that season. Nowadays, this practise is disappearing in some areas, in other areas the practice is still very much alive. Yaks are kept only in the highest altitude zones, where they form an very important part of the farming systems. Poultry and pigs are not kept on a big scale but are found throughout the country, except for the highest altitude zones. Sheep are prevalent only in central Bhutan and goats mostly in the southern regions.

3.2 Marketing

Fifty years ago Bhutanese agriculture consisted still entirely out of subsistence oriented farming systems. The extremely mountainous topography of the country, the hereto-related absence of roads and thereby the limited access to large scale markets, had made it impossible to adopt more market oriented farming systems. However, during the last decades, the topographical constraints have slowly been overcome. More and more roads are being built in the country, giving more and more farmers the opportunity to market their products. Moreover the growing urban population in Bhutan plays an important role in this, as it creates demand for agricultural products. The roads have also made it possible to grow and sell certain cash crops for export. The large-scale cultivation of potatoes and fruits was only practised in places, after establishment of a nearby road. Roads did not only facilitate exports, but they also brought imports. People switched to rice as their staple food, after it was made available at cheap prices.

Throughout Bhutan there is big variation in the level of market-focused-ness of the farming systems. In remote places farmers still use the barter system to sell the few products they trade off. Close to the road and urban centres farmers tend to be more market focused. This is not only because these farmers have better access to markets, but also because they are more integrated in the cash economy. They need cash income to cover their expenses.

Most of the paddy cultivated, is consumed by farmers themselves only, or distributed over the family. Only a small part of the production is sold. Also livestock products are mostly consumed in the household itself. Part of the dairy production is sold, mostly in form of butter and cheese, but also little amounts of fresh milk. Only few animals are sold for slaughter purpose, due to religious sentiments. This means that a substantive part of the domestic meat consumption has to be imported from India.

Important sources of cash income for farmers are their cash crops; predominantly apples, citrus, cardamom and potatoes. These products are sold to traders who in turn sell them mostly to India and Bangladesh. Vegetables and spices are consumed within the household, but the excess production is also sold, mostly on the weekly markets.

Besides agriculture and animal husbandry, many Bhutanese farmers have other sources of income. One of them is the collection of all kinds of wild harvest products, that grow in the forest and which are being collected. The most important wild harvest products in Bhutan are mushrooms, incense, lemon grass and medicinal plants. Other sources of income are working for other farmers or working in government service or corporations. In some particular areas trading with Tibet forms an important income source, as well as trade and transportation within Bhutan. Transportation of tourists is also a source of income to some farmers.

Shifting towards market oriented farming systems is a prerequisite for improving rural incomes and by that reducing rural poverty. Moreover, a more remunerative agriculture will stimulate general economic development in many ways and will reduce rural-urban migration.

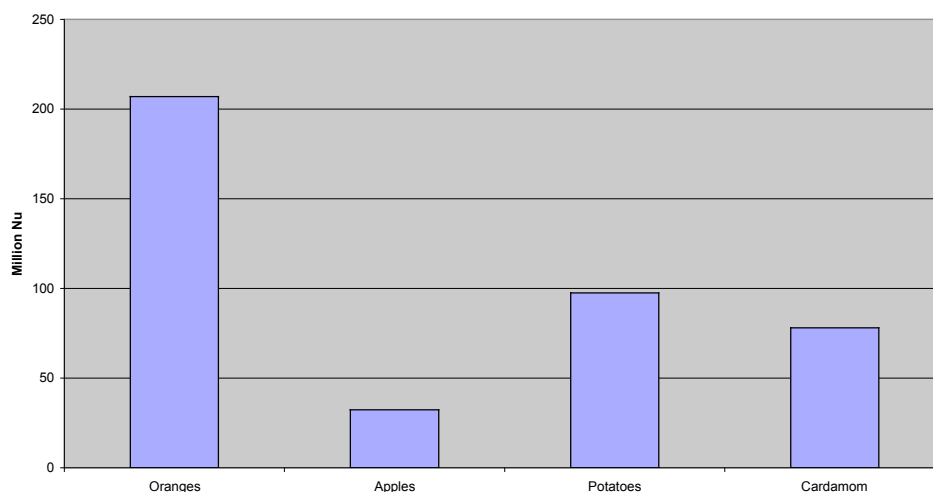
Though substantive progress has been made during the last decades, the transition process of Bhutanese farmers towards market oriented farming is has been limited by the still weak infrastructure (eg. roads, private sector, and institutions) and the slow adoption of modern practices by farmers.

3.3 Food self-sufficiency

An important policy objective of Bhutanese government is that of food self-sufficiency. However, the government is aware that not all products can be produced in the difficult natural circumstances of Bhutan, that is why this objective has been redefined as a objective of food self-reliance, meaning that agricultural export earnings, can pay for the food imports.(Ministry of Agriculture)

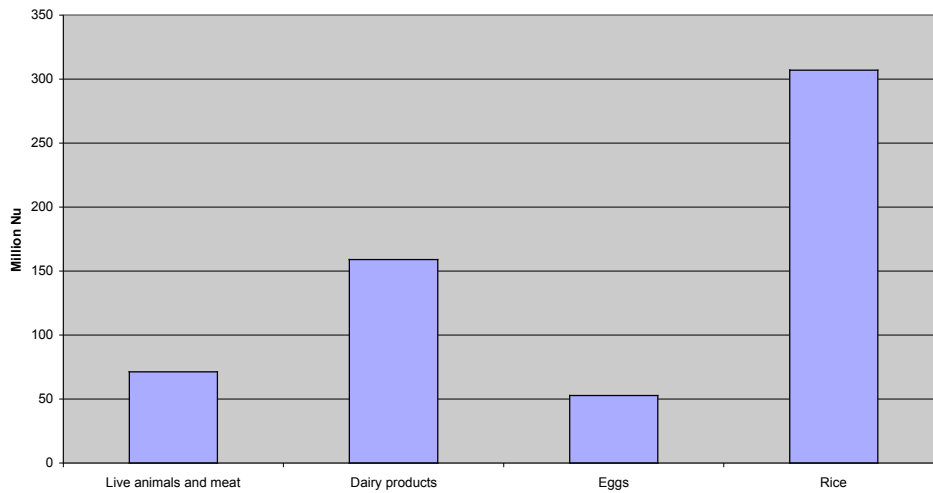
The next graphs show the main agricultural export and import products of Bhutan

Main exports of agricultural products from Bhutan, 2002
Source: Bhutan Trade Statistics, Ministry of Finance



Main imports of agricultural products in Bhutan, 2002

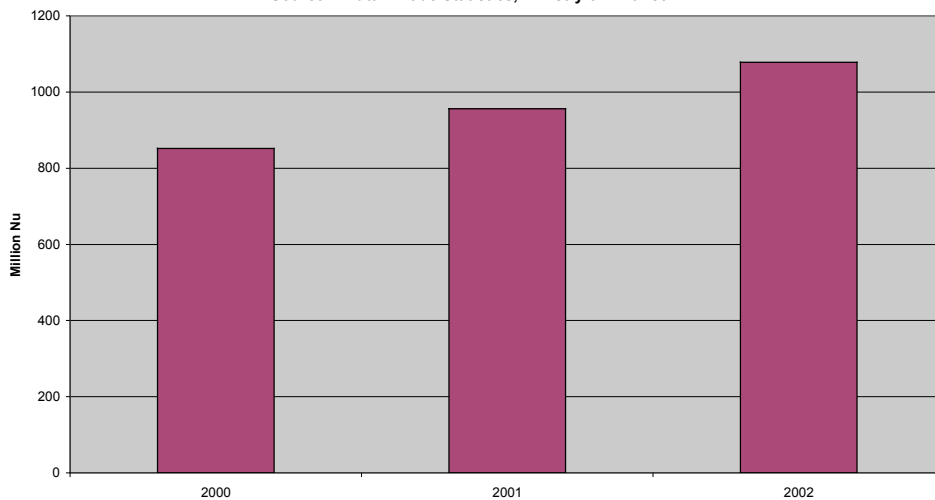
Source: Bhutan Trade Statistics, Ministry of Finance



It seems like the main exports can pay for the main imports, however if we focus on the overall trade balance of foodstuffs, this gives a different view, as shown in the next graph.

Evolution of the Bhutan Food Trade Balance from 2000 to 2002 (Food Imports - Food Exports)

Source: Bhutan Trade Statistics, Ministry of Finance



The graph shows clearly that Bhutan has growing trade deficit in terms of food items. This means that the goal of food self-reliance has not been met so far, and is not likely to be met in the near future as well.

4. Bhutanese agriculture under trade liberalisation

There are many kinds of trade policies, eg. export subsidies, production quota, direct payments and import tariffs. Bhutan is only applying import tariffs; a certain percentage of the value of a product, which has to be paid when imported. Bhutanese import tariffs are not hampering its imports of foodstuffs substantively. The import tariffs issued by Customs are relatively low, compared to many other countries, varying from 0 to 30 percent, for agricultural goods. Moreover, Bhutan has a free trade agreement with India since 1949, and as India is Bhutan's main trading partner, the majority of the food imports face no import duties at all. Besides that, Bhutan is preparing free trade agreements with Nepal and Thailand, which will further facilitate the import of foodstuffs, among other products. Another agreement, which will have the same effect, is the SAFTA (South Asian Free Trade Agreement), but this agreement will be implemented only by January 2006. The global variant of SAFTA is the WTO. Bhutan is applying for its membership of the WTO and seeks to become an official member before the end of the current five-year plan, which ends in 2007.

Lately Bhutan became a member of BIMST-EC (Bangladesh, India, Myanmar, Sri Lanka and Thailand – Economic Co-operation), a regional group of countries, striving for more economic co-operation and aiming for a free trade agreement among its members by 2006.

The idea of all these free trade agreements is to facilitate trade among the participants, by reducing trade barriers, allocating the production of a certain product in a place with the most favourable circumstances to produce it. Countries should focus on its comparative advantages for certain products. Eventually this should lead to more efficient production of all goods, and bringing economic growth to all countries participating.

For Bhutan, becoming a member of these agreements, this will mean it will have to reduce or completely abolish import tariffs issued on imports from other member countries. This will lead to more and cheaper imports. Although this is favourable for consumers, it will mean stiffer competition for the domestic producers, resulting in lower prices for their products. However, the new free trade agreements are not expected to have direct dramatic impacts, as the free trade agreement with India already facilitates imports from India and the low import tariffs do not form a big barrier to imports from other countries. A more important trade barrier seems to be the high transport costs and the small market Bhutan is. However, also these trade barriers are slowly diminishing, as reflected in steadily growth of imports and this despite consumers' preference for domestic products. Obviously the price is more important after all. Increasing imports mean a bigger negative contribution to Bhutan's trade balance.

Another negative implication of lower import tariffs is that it decreases government revenues. However, revenues out of import duties are currently not substantially contributing to the budget of Bhutanese government, forming only 1,68 % of the total national revenue in the year 2000-2001 (calculated, Central Statistical Organization, 2003).

Free trade agreements will have also positive implications for Bhutanese agriculture. WTO will give Bhutan a predictable and reliable international trading environment. Other member countries will have to give access to their markets, according to the conditions they have agreed upon, under their own membership. For instance import tariffs applied by a member country, should be the same for all other WTO members, exporting to that country. Under the current WTO negotiations, the objective is to reduce trade barriers in all member countries. WTO membership will mean better export opportunities for Bhutanese agriculture. The regional and bilateral free trade agreements will mean the abolishment of import tariffs, issued between participants. Also these agreements will facilitate more exports to more countries. This is in line with Bhutan's objective to diversify its trade relations. Moreover, it will bring in more hard currency, when exports to "hard currency countries" increase.

Another positive impact of WTO membership is that it will stimulate foreign investment, among others in the agricultural sector. WTO membership is a kind of overall quality mark for a country, making it more attractive for foreign investment. For agriculture this could mean badly needed investments in agriculture supporting private sector.

A SWOT analysis was conducted to give a systematic overview on the issue, and which can also help to define recommendations.

<p>Strength</p> <ul style="list-style-type: none"> • Green, clean production and image • Exceptional natural circumstances • Consumers' preference for domestic products • Reliable trading environment • Right to transport over other members' territory • Good sign for foreign investment • Good SPS (Sanitary and Phytosanitary System) facilities in place 	<p>Weakness</p> <ul style="list-style-type: none"> • Low productivity • Weak infrastructure (roads, private sector and institutions) • Lower import tariffs • Other import stimulating measures • Reduced possibilities to give subsidies and other policy measures
<p>Opportunities</p> <ul style="list-style-type: none"> • More exports • Organic production • Special products (medicinal plants, floriculture, mushrooms, incense, yak products) • Off season products 	<p>Threats</p> <ul style="list-style-type: none"> • Changing dietetic preferences • More and cheaper imports, resulting in lower prices in the domestic market • Difficulties in supporting the agricultural sector

5. Recommendations

Recommendations for the Bhutanese government have been defined point wise:

Strategic negotiations

Bhutan should try to negotiate strategically for its accession to the WTO. This means that it should study what product imports could form a serious threat to its domestic producers. During the negotiations it should try to maintain the import tariffs at the current level, especially for the threatening products. Before signing any free trade agreement, it would be wise to conduct an in depth study on the consequences, among others, especially in the field of agriculture. Although, political reasons seems to be more important in the decision to conclude free trade agreements, it would be still good to know more about the possible impacts, so measures can be taken to minimise the negative impacts.

Food self-sufficiency

Bhutan should leave the goal of food self sufficiency completely as it is conflicting with the principles of trade liberalisation. Bhutan has no comparative advantages in bulk rice production, so it should not force its farmers to produce rice. If farmers feel they can earn more, if they convert their paddy fields into orchards, they should be allowed to do so. Currently this is forbidden under the Land Act. By this act the income of farmers is seriously hampered.

Production vs. marketing

The current motto of the Ministry of Agriculture is “Production, Accessibility and Marketing”. In my view, accessibility is an integral part of marketing. Till thus far the marketing component has been underestimated in the government’s policies. However, things are changing nowadays, witnessed by the presence of marketing in the ministry’s current motto. A first step of putting more efforts in marketing is taken by the plan to establish a separate marketing division in the ministry. Either under the new division or under the current divisions, more efforts should be put in marketing as soon as possible. If farmers are offered good markets for their products, production will be stimulated simultaneously. If farmers get cash income out of a certain production, they will have the means and will to invest in this production and earn even more. Therefore extension agents should focus more on marketing.

Marketing

Much more efforts should be put in marketing; export promotion, market research, product design, packaging, quality standards, market information, construction of roads, private sector development, regulatory institutions. One idea to enhance the marketing of all agricultural products, could be the establishment of an official “Bhutan Trademark”.

Production

Production and productivity should be further increased. A study should be carried out looking into the question why the adoption of many introduced techniques has been so low among farmers till thus far. What are their reasons to either adopt or ignore new technologies?

Private sector development

The need for private sector development is an important part of infrastructure needed for the development of Bhutanese agriculture. The private sector has to play a predominant role in enhancing both production and marketing of agricultural products. Foreign investment could help to bring in both the required capital and expertise. However, the rules for foreign

investment seem to be too restrictive, making it almost impossible. Relaxation of these rules is therefore recommendable. Co-operatives are also a means to fill up the distance between farmers and the market, however, sometimes the private sector is a more efficient instrument to do the job.

Better co-ordination between the ministries

Currently there seems to be little communication and co-ordination between the Ministry of Agriculture and the Ministry of Trade and Industries. A better understanding of the others' activities could lead to more comprehensive policies.

It is important to describe more concretely what is meant with points made before, therefore this has been worked out for a few product groups.

Niche products

Niche products are special products for a small, specialised market. Bhutan has potential for the production of this kind of products, due to its exceptional natural circumstances and clean production. Research needs to be done on what products can be grown for what price and after that market research needs to be carried out if there is potential in the market for the identified products. If one product still appears to be interesting a concrete marketing plan should be made, including a contract with a trader willing to buy the products at a certain price, if a certain minimum quantity is being delivered. In terms of production a realistic plan should be made with enough farmers, to, at least, meet the minimum quantity, contracted with the trader.

Dairy products

For livestock products there is little scope for export, the first objective would be to meet the domestic demands and reduce the imports of livestock products from abroad. In terms of dairy the collection and processing of milk is important, but the marketing of the products is at least as important. In depth market feasibility studies should be carried out before setting up a project. As the Bhutanese dietetic preferences are changing, the products offered by Bhutanese agriculture should try to meet these new demands. A big deal of dairy imports consists in Amul (Indian co-operative) cheese and butter and milk powder. Efforts should be made to offer a Bhutanese alternative for these products.

Meat and eggs

The commercial production of meat and eggs in Bhutan is restricted mostly due to religious sentiments, connected to the killing of animals. Many initiatives should be taken up to overcome these constraints. An important one would be to try to convince the religious powers of the hypocrisy of these sentiments and the importance of increased commercial meat and egg production in Bhutan. The best outcome of such discussions would be a declaration by the religious powers, stating that killing an animal is as bad a sin as eating its meat. Other initiatives could be the establishment of many more pig and poultry farms, around the urban centres. These farms can be rent out to entrepreneurs with the required skills to run such a farm and willing to take up the business. Another initiative could be the purchase of unproductive cows by the government and transporting them to some other place for slaughtering. It is likely, that farmers will be more willing to sell their unproductive animals to such an undertaking, in stead of the local butcher. To stimulate them even more, the sell of an unproductive cow, could be coupled with the supply of a productive one.

Cash crops

The export of the current cash crops could be improved, both in terms of volume and the price earned for these exports. To increase the production more farmers should be stimulated to take up these productions and if possible, more land should be made available to them. A better pest management could improve the production, both in terms of quality and volume.

The same applies for other aspects of production. On the marketing side, research should be conducted how to fetch higher prices. Sale co-operatives could possibly negotiate higher prices. Guaranteeing higher quality standards can fetch higher prices. Accurate market information can rule out the optimal moment of selling.

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