

COMMODITY CASE STUDY: VEGETABLE GHEE

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The vegetable or *vanaspati* ghee industry has grown rapidly in Nepal in the last two decades, from just one manufacturer in 1973 to a total of 16 firms currently.¹⁰⁹ Ghee has become Nepal's major export item, accounting in recent years for some 10-15% of total export. Almost all the export is to India. This industry represents a category of Nepalese industries that takes advantage of two factors: differential tariffs in Nepal and India on raw materials and final product, and preferential trade relationship with India. One question often asked is what is the future of industries of this type after Nepal became a WTO Member. Moreover, the current competitiveness of the industry could also change in the future for other reasons, e.g. further tariff cuts by India as part of the Doha Round. It could also change if India changes its domestic and trade policies unilaterally.

The purpose of this case study is to illustrate where and how the provisions of the various WTO Agreements e.g. preferential trade agreement (PTA), SPS/TBT, import surges and quotas; and the Nepal-India trade treaty affect the commodity. The chapter is divided into two sections: an overview of the industry, covering its growth, trade and other aspects and a discussion on the major issues facing the industry.

AN OVERVIEW OF THE VEGETABLE GHEE INDUSTRY

The first vegetable ghee manufacturer, *Nepal Vegetable Ghee Industries Limited (NVGI)*, a public sector undertaking, was established by the government in 1973, encouraged by a study supported by UNDP in 1972 that highlighted the advantages of this industry for Nepal in terms of both cheap alternative source of nutrition to low income population groups and for promotion of oil crops production in Nepal. The industry grew rapidly between 1981 and 1995 (Table 1). By 1990, registered installed capacity had already exceeded 100 000 tonnes, which further increased to 134,180 by 1995. The capacity addition after 1996 is only 6.75% (Figure 1). Thus the available statistics dispel a common notion that the growth of this industry was prompted by the Nepal -India Trade treaty of 1996. What could be said is: the tariff differential between Nepal and India played a role in the growth of this industry. Cumulative investment of about Rs.3 billion as fixed capital and Rs 1.5 billion as working capital is said to have been made in this industry.

One issue that has been so controversial that it reached the court is the level of actual installed capacity for recent years, notably 2000-02 period. During the survey of the industry undertaken in the course of this study, most manufacturers reported that actual production in this period was almost twice as high as the officially registered plant capacity. If that is correct, actual capacity would be about 282 000 tonnes, not 146 180 tonnes as shown in Table 1.

¹⁰⁹ The 1966 Food Act of Nepal defines vegetable ghee as "edible processed oil through selective hydrogenation process for solidification".

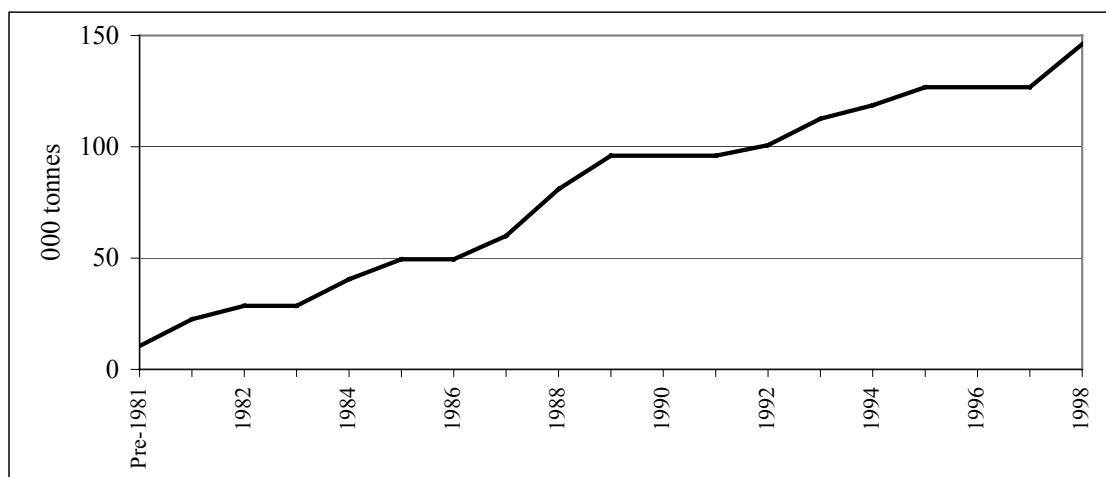
Table 1: Growth of the vegetable ghee industry – number and installed capacity of the production units: 1981-2000

Period	Number of units		Registered capacity (M. Ton/Year)		% Change in	
	Added	Total	Added	Cumulative	Number	Capacity
Before 1981	2	2	10,500	10,500	-	-
1981-85	4	6	39,000	49,500	200.0	371.4
1986-90	5	11	54,000 ^{1/}	103,500	83.3	109.1
1991-95	4	15	30,680	134,180	36.4	29.6
1996-98	1	16	12,000	146,180	6.7	8.9

^{1/} Includes three establishments with registered cumulative capacity of 31,000 ton that can produce ghee, oil and margarine

Source: Based on the information provided by Nepal Vegetable Ghee Producers' Association (NVGPA).

Figure 1: Growth of registered production capacity of vegetable ghee industry in Nepal: 1981-1998



Source: Based on the data made available by the NVGIA summarized in Table 1.

During the course of the fieldwork for the study it was revealed that the registered capacity refers to production capacity in a single shift while the plants can be used for up to three shifts in 24 hours. Thus, the actual capacity is higher than the registered capacity. Capacity utilization of the industry for recent years, showing both registered capacity and an estimation based on the information provided by the industry representatives during the course of this study is shown in Table 2. While the registered capacity appears to be fully utilized the utilization rates are less than 80% of the actual capacity as reported by the industry.

Table 2: Capacity utilization of vegetable ghee industry

Year	Capacity (M. Ton)		Production (M. Ton)	Capacity utilization (%) based on:	
	Registered	Actual ^{1/}		Registered capacity	Actual ^{1/} capacity
2000-01	146,180	281,860	149,152	102	54
2000-02	146,180	281,860	216,312	148	78

^{1/} Actual capacity is as reported by the industry

Source: Compiled on the basis of information from NVGPA.

Table 3 shows how the vegetable ghee produced in Nepal is utilized. The main message is both simple and striking – some 85% of the output is exported to India. Both domestic consumption and estimated exports to Tibet China amount to a tiny 2% of the production. The rest, about 10%, is not properly accounted for and most probably is ending stocks.

Table 3: **Estimated utilisation pattern of vegetable ghee produced in Nepal**

Uses	2000/01		2001/02	
	000 Tonnes	%	000 Tonnes	%
Total production	149152	100	216312	100
Exports to India	128198	86	183698	85
Domestic consumption	3635	2	3635	2
Exports to Tibet	3200	2	4000	2
Balance	14119	9	24979	12

Source: Estimation based on discussion with the industry representatives and NVGPA.

Given that some 86% of the product is exported to India, and that the production capacity seems to be underused, the industry is mostly demand-driven. Table 4 shows that India is a huge market for this product, and Nepal's export amounts to only a small fraction of India's total production. The main markets for Nepalese ghee are bordering states of India, namely Bihar, Uttar Pradesh, Jharkhand, Uttaranchal Pradesh, Assam and Chattisgarh. This seems to be so not only because of lower transport costs but also due to taste and preference for Nepalese ghee. Reflecting the export orientation of the industry, all manufacturing firms in Nepal are located in border areas.

Table 4: **India – consumption, production and imports of vegetable ghee** (000 tonnes)

Year	Consumption	Production	Import (oils)	Import form Nepal
1996/97	9954	8200	n.a.	14
1997/98	104494	7537	n.a.	34
1998/99	11540	7830	4800	53
1999/00	11910	7000	5000	63
2001/01	12348	7000	5600	126

Source: *Prospect for Palm Oil in Indian sub-Continent*, Compiled by Mr. Dorab Mistry, based on information in different issues of Economic Times of India; and Nepalese newspapers.

Regarding the Nepalese market, per capita consumption of vegetable ghee, based on the 1996 Nepal Living Standards Survey, is estimated to be only 0.64 kg. This gives total national consumption of just below 4 000 tonnes (Table 5). Some analysts however consider that the market is much bigger than this if other products that substitute for vegetable ghee are also taken into account. These are all price-elastic products and so the demand for vegetable ghee could expand if its price falls or the price of the substitutes rises. Taking the products in Table 5 into account, the maximum demand for vegetable ghee in Nepal comes at 67 000 tonnes. Actual market size could be larger because these estimates are based on household demand and do not include institutional/industrial demand of hotels and restaurants, confectionary and biscuit industry, sweet shops etc.

Table 5: **Estimated total demand for vegetable ghee in Nepal**

Commodity	Per capita consumption	Population (Million)	Total consumption (tonnes)
Vegetable ghee	0.16 (kg.)	23.2	3635
Non-vegetable ghee	0.64(kg.)	23.2	14649
Mustard oil	2.9(litre)	23.2	48687
Total	-	-	66971

Source: Computation based on the 1996 Nepal Living Standards Survey data.

Finally, one much debated issue is the prospects for diversification to markets. Tibet in China is often cited. It has been reported by the industry that at one time some 7 to 8 thousand tonnes of ghee were exported to Tibet for lighting lamps. It was also consumed to a limited extent. However, consumption demand is reported to be shrinking mainly for quality reason (the “hardness” found in the ghee is an indication of low quality). While this issue remains, other constraints in Trans-Himalayan trade could be overcome to facilitate trade, notably banking procedures. Some analysts feel that the Tibetan market remains highly unexplored and will remain so as long as there is the lucrative market in India.

Bhutan is also seen as a potential market. But a trade agreement is necessary for actual trade to take place. Finally, Bangladesh is also seen as a potential but little explored market.

Except for one brand made by a pioneer industry based in Hetauda that traditionally uses soy oil as the main raw materials, crude palm oil (CPO) is the primary raw material used by all other manufacturers. The industrialists claim that the CPO-based ghee has higher nutrition value and is of better quality. Imports are mainly from Malaysia, but sometimes from Indonesia depending on the price. Imports are made by consortiums in order to import CPO in large lots to save cost.

The cost of production of vegetable ghee is higher in Nepal than in India for a variety of reasons, as is the case with many other products (see below for reasons). This study found that Nepal is basically a price taker for this product, the price being set by Indian traders who import ghee from Nepal. As all manufacturers face similar constraints and costs on raw materials and other inputs, and have similar technology, inter-firm differences in cost of production are minimal. The prices of different brands of the product vary by no more than 2-3 rupees per litre.

Factors contributing to cost advantage in Nepal (i.e. lower production cost):

- Low customs duties on raw materials
- High tariff on palm oil in India (as high as 75% in recent periods)

Factors contributing to cost disadvantage in Nepal (i.e. higher cost of production):

- Lack of independent hydrogen plants in Nepal, which are available in India at low cost as a by-product of other industries
- Higher cost of imports (being land-locked)
- Higher establishment costs in Nepal

- Higher cost due to longer period for raw material replenishment (lead periods of up to 2-3 months)
- Nepal's export duty of 10%.

POLICY ISSUES FACING THE INDUSTRY

This section discusses various issues facing the industry. One purpose is to illustrate where and how various WTO-related provisions appear relevant to the industry. In addition, other issues facing the industry are also addressed.

Preferential trade agreement (PTA) with India: Trade in vegetable ghee with India depends on preferential access to the Indian market, under the Nepal-India trade treaty. . This means respecting all the provisions of the treaty, which include value addition rule and, more recently, quotas. These are the negative aspects of market access under a preferential trade agreement compared with the MFN trade regime. India charges about 35% tariff on ghee on a MFN basis, while there are no customs duties on imports from Nepal (there are some other charges). The other major factor for the cost competitiveness of this industry is duty on the main raw material, palm oil, which is imported - duty free in Nepal but faces up to 75% tariff in India. Although other costs of production are generally higher in Nepal (true with most commodities), these two factors together provide competitive edge to vegetable ghee exports from Nepal.

In this regard, a number of questions were put to ghee manufacturers for their views on the effects of the elimination of the preferential access to the Indian market. The recorded perceptions are shown in Table 6. On the whole, it is clear that the industry is worried about the possible loss of the preferential market in India, and as many as 90% reported that it would be very difficult to survive in the absence of the special trade regime. One positive aspect is the claim that Nepalese ghee is of higher quality relative to the Indian product and much preferred by the Indian consumers.

Table 6: **Industry response to some questions about the trade regime governing ghee export to India**

Questions	Response (%)	
	Yes	No
Do you export vegetable ghee to India?	100	-
Can your industry survive on domestic demand?	10	90
Are you fully dependent on export to India?	90	10
Do you see banning export to India as a threat?	90	10
Is India imposing non-tariff barriers?	100	-
Do you sell produce to India through Central Warehousing Corporation, India ?	100	-
Do you export under quota only?	100	-

Source: Compiled based on interview

Non-adherence by India with the “letter” and “spirit” of the 1996 trade treaty: The Nepalese industry feels that while the provisions of the Nepal India trade treaty of 1996 appear fair, these have been undermined time and again from the Indian side through ad hoc changes in import practices. This has been a major

source of uncertainty and has occasionally led to considerable losses to the industry. The issue at hand is how to prevent such ad hocisms. The industry feels strongly that this requires the government officials and trade negotiators to consider some changes in the agreement. One would be to adapt the treaty provisions to the extent possible to those of the WTO agreements, so that the rules of the game are fully transparent. The second approach is to negotiate for provisions that minimize ad hoc changes in policies and practices from both the Indian and Nepalese sides.

The value addition issue: Nepal's 1987 industrial policy defines value addition as "the amount left after deducting the cost of raw materials and amount paid in lieu of salaries, allowances, wages, interest, dividend, royalty and industry premium from the factory price of a product". The Nepal-India treaty of 1996 in its Protocol states that the government of India will provide preferential access to the Indian market free of customs duties normally applicable and quantitative restrictions, except as mentioned elsewhere, for all articles manufactured in Nepal, provided they fulfil the qualifying criteria given below:

- Articles manufactured in Nepal wholly from Nepalese materials or Indian materials or Nepalese and Indian materials.
- From 6 March 2002 to 5 March 2003, the total value of materials, parts or produce originating from non-Contracting Parties or of undetermined origin used does not exceed 75% of the ex-factory price of the articles produced, and the final process of manufacturing is performed within the territory of Nepal.
- From 6 March 2003 onwards, the total value of materials, parts or produce originating from non-Contracting Parties or of undetermined origin used does not exceed 70% of the ex-factory price of the articles produced, and the final process of manufacturing is performed within the territory of Nepal.

Some further investigation was carried out on value addition rates (not reported here for space reason). One interesting finding was that the industry was sensitive about the purchase price of the main raw material, palm oil, as this influences the rate of value addition. For example, when purchase price is higher, the rate of value addition is lower, which matters for the export eligibility of ghee. Another important factor determining the fate of this industry is the prevalent tariff rates in India and Nepal. There is a need for gradual decrease in the share of raw materials from sources other than Nepal and India. This is clearly very difficult for this industry.

Potential threat emanating from revisions of the WTO bound tariffs, notably by India: India imports vegetable ghee from Nepal only, which is a good news for Nepal. India's current applied MFN tariff on ghee is 35%, which it seems, has been effective in limiting imports from elsewhere. Palm oil is the main raw material, which India imports in large quantities and mainly for cooking purpose. Import tariff on palm oil has varied widely in the last 5-6 years, responding mainly to changes in the world market prices, as well as to domestic demand considerations to some extent. When the world price of palm oil was high in the late 1990s, tariff

was as low as 10%, which after about a year and half rose to as high as 70% as the world prices crashed. The import of oil has already been decanalised.¹¹⁰

It is interesting to note here, on the side, the double-edged nature of a WTO commitment. In another paper in this volume, on market access, it was said that Nepal's bound tariffs in the range of 30-50% provide good scope for varying tariffs, as an instrument of safeguard, when faced with similar external shocks (i.e. price depression). Herein lies an interesting point – while Nepal may like to have this policy space for itself, similar policy space in the export market generates uncertainty for Nepalese export, leading to export losses. Thus, as an issue, should Nepal be supporting, for example in the WTO negotiations, a position that calls for high tariff bindings for the sake of policy space for itself, or a position of low bindings because these limit the policy space for the trading partner and thus increase predictability to Nepalese exports? There is a dilemma that all countries face in trade negotiations.

Exporting ghee through a State Trading Enterprise under canalization:

The import of Nepalese vegetable ghee is “canalized” through the Central Warehousing Corporation (CWC) of India, a government agency. Under the current arrangement, Nepalese exporters are authorized to export the product to India only through importers registered with the CWC. There are fees to be paid. The Indian importers obtain their registration on payment of IRs 5000 annually to CWC while Nepalese exporters pay service charge (royalty) of IRs 200 per tonne to the CWC. The industry representatives interviewed in the course of this study expressed serious concerns over the canalization of their export through the CWC. On this, the WTO Agreement on Agriculture in its current form is not of much help. This Agreement allows trade to take place through the STEs, provided that the operations are transparent etc. and do not impede trade. In practice, however, the WTO has not been effective to monitor the operations of the STEs to ensure that the practices are in conformity with the spirit and letter of the Agreement. The Nepalese vegetable ghee industry claims that the CWC operations are neither transparent nor conducive to trade facilitation, which of course is very difficult to establish objectively. It is also somewhat disappointing to see that the new WTO negotiating framework agreement on agriculture (in the context of the Doha Round negotiations) does not seem to have improved disciplines on the operations of the STEs of the developing countries. Thus, for now, the Nepalese industry seems to have little options other than to negotiate with India for improved trade facilitation measures or to learn to live with the CWC rules and its requirements.

The import surge claim by India: Vegetable ghee is one of the five products identified by India as having “export surged” from Nepal, others being copper wire, GI pipes, acrylic yarn and zinc oxide. This Indian claim has been much debated in Nepal. The main argument made by the Nepalese side has been that the Indian claim is not justified. First, the Nepal -India trade Treaty does not have a clear built-in safeguard provision (quotas were introduced only in the 2002 revision of the Treaty). Second, and more importantly, the rationale given by India is very difficult to accept because it said that the import surge hurt the Indian vegetable

¹¹⁰ For more details on the Indian tariff policy on palm oil see: http://www.fcamin.nic.in/sugar_edbl.htm.

ghee industry. No proof of injury was given other than complaints by some firms in northern Indian states.

For lack of clear safeguard guideline in the Treaty it makes sense to refer to the WTO rules on trade remedy measures.¹¹¹ In the WTO rules, “injury” has to be shown on the “industry” as a whole, not on some individual “firms” located in some part of the country. It is the entire Indian vegetable ghee industry that has to be affected negatively by the surge, which clearly was not the case because Nepal’s export amounts to a tiny share of the total Indian market, and so it is extremely unlikely that such a large market is affected by Nepal’s exports. This is clear when one compares the volume of the Nepalese export and India’s total market (Tables 3 and 4, above). Moreover, the export of the Nepalese ghee was neither dumped nor subsidized, and so the respective trade remedy measures (anti-dumping and countervailing) are irrelevant here. The third remedy rule – emergency safeguard – also does not apply because it also requires the injury test. Finally, India could not resort to the special safeguard of the AoA because first India does not have access to the SSG in the WTO and second this provision is not part of the Treaty.

It seems that the Indian vegetable ghee market is somewhat fragmented. Otherwise, why would the Indian “firms” located in north India complain about import surges from Nepal? If markets were fully integrated, the Indian “industry” should not have felt localized market disruptions, as claimed. This indicates that the north Indian market is captive market for firms located in that region, and it is where the competition takes place. In fact, media campaign and political lobbying against Nepalese ghee have been quite common in bordering regions.

The luxury tax/countervailing duty: Indian states have imposed such duties as luxury tax of 7% in Orissa and 16% in the UP. In addition, a special additional tax of 14% was also imposed, but withdrawn after some time. These changes were implemented at different periods without any prior notification. This has created some uncertainty, and many traders take this as trade harassment.

Allocation of export quotas by Nepal: Following the imposition of the quota system on ghee by India, it became necessary for Nepal to allocate export quotas to the Nepalese firms. As quotas have substantive values the way they are allocated is a sensitive matter and occasionally raises controversies. The current allocation system is as follows. Of the total quota of 100 000 tonnes of ghee fixed by the trade Treaty, Nepal’s Department of Commerce (DoC) sets aside 4% (4 000 tonnes) to new industries and 4% to industries which come under the VAT net. Of the remaining 92 000 tonnes, 69 000 is distributed to 16 ghee firms equally, and in instalments. The remaining 23 000 tonnes is distributed as follows: 13 800 tonnes to the firm that exported the highest amount in the previous year and the rest 9 200 tonnes to the industry with the highest capacity. The customs points through which exports are to be made are also specified by the DoC.

As regards the procedures, the DoC, upon receiving notification of total quota from the Indian government, issues quotas to respective industries in close collabo-

¹¹¹ This topic is covered in the chapter of this volume (see Gautam and Malla 2004).

ration with the FNCCI. FNCCI issues the Country of Origin Certificates through its District Chambers of Commerce, which is further examined for compliance and certified by the officials of the Indian offices at boarder customs points. In case of a “reasonable” doubt about the authenticity of the certificate, the Indian customs may seek a clarification from the certifying entity. There is also a provision for the Indian officials to request for a joint visit of the manufacturing facility, whenever this is considered necessary to clarify things.

On both the policy and procedures, exporters have expressed some dissatisfaction. One grudge is over the number of instalments of quota allotment. Their position is that the allotments should be made in one single lot as this provides to them greater degree of freedom for planning the replenishment of raw materials (mainly palm oil) as well as for exporting ghee. They argue that the uncertainty associated with frequent allotments makes it difficult for them to procure the full amount of the raw materials required, at lower prices than when replenishments are made frequently. The other issue is the short gap between the time the quota is received and the time when the product has to be exported. For example, often quotas are not allotted until mid-February while deliveries should be completed by early March before the end of the Indian fiscal year. The industry has also made a suggestion that quotas should be allocated based on export performance rather than on an ad hoc basis as done currently.

Nepal’s 10% export tax: The industry surveyed during the course of this study obviously expressed dissatisfaction with this 10% tax, saying that it cuts Nepal’s competitiveness. This is an expected reaction. The counter view, from outside the industry, is that some export taxation is justified because the industry benefits from duty free raw materials and access to a highly lucrative market opened in large part through painful negotiations by the government.

That export taxes cut competitiveness is factually correct. As export prices are given in this case, i.e. beyond the control of the ghee exporters, the 10% tax reduces profit margin and since sales in Nepal are very small, it is difficult to pass this tax to consumers. The main issue here is what is the opportunity cost of the tax? How would the industry be affected if there were no such taxes? What would be the optimal export tax? Who gains and who loses? In other words, this is a broader issue of the incidence of export taxation, and can be assessed only through a careful analysis of the questions of this nature. The government could also argue that it provides much more attention to this industry (e.g. negotiating capital), compared with many other industries, and so a 10% tax is justified for this “service” alone. So, to resolve this issue, a broader view is needed, rather than an approach limited to a particular industry paying the tax.

The issue of actual production capacity and its implications: The issue of actual installed capacity for recent years, notably 2000-02 period became so controversial that it reached the court. In the survey of the industry undertaken in the course of this study, most manufacturers reported that actual production capacity in this period was almost twice as high as the officially registered capacity, i.e. about 282 000 tonnes and not 146 180 tonnes as shown in Table 1. Resolving this matter became important for various reasons, including for allocating export quotas

to manufacturers. The industry holds that, the Industrial Act 2049, clause 9(1) and its amended schedule (2), and the provisions of the industrial policy allow to increase production capacity by respective manufacturers as demand for the product increases. They cited the Supreme Court ruling of 8 November 2002 in support of their action to raise capacity without prior approval of the Department of Industries. Yet the difference in the position of the Department and the industry continues. This issue needs to be resolved, i.e. the true production capacity has to be ascertained, and the implications of higher than the registered capacity noted by both parties. Also, the government should clarify whether manufacturers are allowed to change production capacity in response to demand.

Issues on quality standards, assurances and inspections: The processing facilities and technology available with the vegetable ghee industry in Nepal are based on Indian technology and appear to be capable of producing quality product. The government has prescribed detailed specification of standards for vegetable ghee production in Nepal. In India too, the eco-mark criteria for food products specify a number of requirements, e.g. that all formulation of edible oils shall meet the relevant standards of the Bureau of Indian Standards pertaining to quality.

All manufacturers interviewed said that they produce vegetable ghee meeting the quality standard set forth by both the Indian and Nepalese governments. Their product is subject to test by the government of both countries and hence there is no scope for quality compromise. Also, they said that so far no negative test results have been received from the laboratory or any complaint from consumers. However, the industry complains that the Indian media often comes out with negative comments on the quality aspects of the Nepalese ghee, although there is no scientific basis for this. Indeed, consumers in India are fully aware of the higher quality and popularity of the Nepalese ghee, while the Indian ghee is processed with locally available edible oils.

As regards improvement measures, being a product almost fully exported to India, adherence to the Indian Standard would seem to be a good strategy. It is not clear to what extent the Nepal Standard (NS) certification helps the acceptance of Nepalese products in India. Indeed, it was found that a number of processors in Nepal had obtained the NS certification for ghee – at least one brand registered with NS by each manufacturer. The industry also feels that ISO registration also helps in the acceptability of the products.

Other measures for improvements as recommended by industry representatives include:

- Pragmatic approach to the enforcement of the Food Law.
- Simplification of export inspection procedures.
- Strengthening the Department of Food Technology and Quality Control.

Increasing domestic production of oilseeds: The ghee industry is almost fully dependent on the import for raw materials. As a result, it is normal that some discussions have taken place on increasing domestic production of oilseeds and reducing import dependency. One argument made is that there are good potentials for raising domestic production but little has been done so far, e.g. in terms of re-

search and production programmes. However, little is known in concrete terms on what is required to raise the level of self-sufficiency. While it is unlikely that Nepal will be able to produce oilseeds in any significant way, relative to the immense needs of the ghee industry, the feasibility of raising oilseeds production is worth exploring. The key question to be asked is what are the opportunity costs of substantially raising oilseeds production in Nepal, even if this is technically feasible? It may turn out that growing more oilseeds for the sake of the ghee industry may not make an economic sense for Nepal, given the relatively low real prices of palm oil in international markets.

In this context, India's experience on oilseeds is worth analysing. In the mid-1980s, as edible oil imports soared, India launched a programme called Technology Mission on Oilseeds with the aim of import substitution. Key instruments used were research and technology development, attractive farm prices and import control. The programme was effective in raising oilseeds production and reducing import dependency. However, it proved to be an expensive programme to maintain. Studies have shown that resource use efficiency in oilseeds production was low in India and oilseeds production grew at the cost of cereals. For these and other reasons, India changed its policies in the 1990s, liberalizing edible oils trade and reducing price support. Currently, palm oil is the largest agricultural import of India. The key message of this experience is that it is essential to analyse resource costs and other economic issues before deciding to raise domestic production substantially. Good studies covering these issues are lacking in Nepal, including for other commodities.

Economic analysis of the benefits and costs of the ghee industry: One issue that attracted some discussion at the November 2003 workshop where this study was discussed was the net value of the industry to Nepal and the rationale for government support, including efforts made in negotiating better deals for the industry in the Indian market. One view was that the industry deserves special support from the government in view of important contributions to ancillary industries and substantive revenue. The counter argument made was that this industry has little backward linkages and hence does not merit more support than to other commodities. It was also noted that the modern ghee industry had some negative effects on traditional small oil processors, which had strong backward linkages and made contributions to agriculture and poverty reduction. In view of this, one recommendation was for undertaking an in-depth economic analysis of the industry covering all these issues. In fact, there should be a series of such studies covering several agricultural commodities so that a meaningful comparison could be made.

References

- ANZDEC (2002), *Agriculture Sector Performance Review: Final Report*, Volume 1. ANZDEC Limited, New Zealand.
- CBS (1996), *Nepal Living Standards Survey Report 1996*. Central Bureau of Statistics, Kathmandu.
- Federation of Nepalese Chamber of Commerce (2002), *Economic Indicators*, <http://www.fncci.org/indicator.php>

- FAO (1999), Conference on International Food Trade beyond 2000: Science-based discussions, Harmonization, equivalence and mutual recognition, Papers and Proceedings, FAO, Rome.
- FAO (2002), Committee on Commodity Problems, Sixty-third session, Papers presented and Proceedings, 6-9 March 2002
- Government of India, (n. d.), *Eco mark Criteria for food in India*, at: www.envfor.nic.in/cpcb/ecomark/ecomark.html
- HMG, (1993) Industrial Enterprises Act, 1992, Ministry of Industry, Kathmandu.
- HMG, (1998), Food Act, 2023 (1966), Ministry of Law and Justice, Law Book Manangement Board, Kathmandu
- Kantipur Daily (2003), *The Economy*, March 2,2003. at: www.kantipuronline.com
- Karki, T. B. (n.d.) *Food Quality and Safety Consideration in International Food Trade*, Central Food Research Laboratory, Kathmandu.
- Marketing Development Directorate (2002), *Agricultural Marketing Information Bulletin -Special Issue 2002*, Department of Agriculture, Kathmandu, 2002.
- Nepal Industrial Development Corporation (1973), *Industrial Prospects in Nepal*. Nepal Industrial Development Corporation, Kathmandu.
- Shakya, D. B. (1999), “Nepal’s Experience in agricultural Trade – Constraints and Expectations from WTO agreements”, A paper presented at the FNCCI Workshop on “UR Agreement on Agriculture and Agricultural Trade of Nepal, Kathmandu.
- Sharma, Anil (n. d.) “Agricultural Trade and Food Security: A Case Study of India”, National Council for Applied Economic Research, New Delhi.
- Sharma, Anil (n. d.), Food and Public Distribution and Edible Oil Scenario Directorate of Vanaspati, Vegetable Oils and Fats. (Department of Food & Public Distribution), Ministry of Consumer Affairs, at http://www.fcamin.nic.in/sugar_edble.htm
- South Asian Association for Regional Cooperation, Kathmandu, at: <http://www.saarc.org/>
- Trade Promotion Centre (1999),Treaty of Trade between His Majesty’s Government of Nepal and The Government of India, at: <http://www.tpcnepal.org.np/tagree/main.htm>
- World Bank (2002), Nepal: Economic Update 2002, Nepal Development Forum, The World Bank, Washington.