



## **SNV CAPACITY DEVELOPMENT SERVICES FOR APICULTURE IN ZAMBIA**

"Enhancing the Competitiveness of the Zambia Apiculture Industry; Honey Value Chain Development

**Sector:** FORESTRY- BEE KEEPING

**Starting Date:** January 2008

**Ending Date:** 2010 January /February

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## **EXECUTIVE SUMMARY**

Zambia's bee products sector has potential to contribute to income generation and employment creation and also to supplement other economic activities in the rural and urban settings. The Zambian Honey Sector has a highly developed institutional framework with many actors, government bodies, private sector companies and non-governmental organizations while key actors include the Zambia Honey Council whose key mandate is to co-ordinate the sector, the private sector is the key driver for developments in the sector.

However, to increase efficiency and effectiveness of the sector, coordination among key sector players needs to be enhanced including mitigating against duplication by facilitators of development assistance and market inefficiency.

Actors tend to have a different view and understanding of the causes and needs to improve inefficiencies in the honey value chain and hence the need for a broker (whether formal or informal) is required to play the role of promoting shared understanding and more robust relationships for actors to fully exploit the opportunities in the market. This is the premise on which SNV Zambia's contribution to this sector is based on.

SNV will not work alone in this program but partner with key stakeholders namely; the private sector companies & Bee keeping co-operatives who will be key drivers in access to markets for bee keepers. This program focuses its interventions in five main areas that include establishment of bulking & collection systems, savings promotion amongst bee keepers; access to processing technology; capacity development around honey standards and the establishment of Honey stakeholder forums at provincial level. The program will reach out to bee keepers in four provinces; West, North Western and Northern provinces including Luapula province.

The Overall goal of the SNV Honey Value Chain Development program is to contribute to an increase income of 15,000 bee keepers from \$1 to \$3 a day, increase in production capacity from the current average of 60 kg/ to 300kg per season, stimulate the efficiency and competitiveness of the honey value chain by improving standards, processing capacity so as to access higher value niche markets

through FLO certification or organic certifications and to achieve a total sales value of \$1,000,000 by 2010. Program beneficiaries include Bee keepers, Honey processors, local capacity builders active in the sector, Policy makers and Sector regulators. A three pronged strategy is proposed to realize the programs goals which include increasing production capacity of bee keepers; increasing processing and marketing efficiency amongst local honey processors and finally improving co-ordination in the sector.

The program has established key performance indicators that will be monitored as per SNV results management cycle. Key performance indicators include; increases of income, production & employment; numbers of beekeepers involved; volumes of honey & beeswax sold, the quality of honey on the market; Mitigating the impact of HIV/AIDS in the sector, and the quality of the enabling environment for the honey sector. Program risks are many, key ones include lack of commitment to accountability; poor relationships between stakeholders; inability to collect and manage industry data; poor sector regulation and compliance to standards.

## **GENERAL BACKGROUND**

### ***Context***

Forests and forest industries contribute at least 3.7 percent to GDP; the largest contribution comes from the wood fuel sub-sector. Charcoal production (mostly commercial) and firewood collection (mostly subsistence) account for 2.2 and 0.8 percent, respectively. The most significant contribution from the forest sub-sector is that of providing energy for the agricultural and domestic needs of 90 percent of the Zambian population. However, the potential contribution of the forest resource to the national economy could be much higher than at present as the overall productivity is sub-optimal.

Productivity (measured per unit of financial or labour input) is low at all stages of the marketing chain, from production, to processing and marketing. Transaction costs are high due to poor infrastructure such as roads and telecommunications. Therefore significant economic and environmental gains may be achieved through increasing the efficiency of forest industries, including small-scale enterprises. The Zambian forest resource is dwindling mainly due to charcoal burning; annual deforestation is estimated at 900,000 hectares indicating an urgent need to reduce the high rate of deforestation, and to mitigate its impact on the people and the environment.

If greater value can be derived from other sustainable forms of forest utilization and production, the threat of deforestation and its longer term environmental and economic consequences will be reduced and greater value will be placed on the existence of forests as a source of sustainable livelihood. Without a three pronged approach to promote sustainable non-timber/forest based enterprises the future of Zambia's forests is at risk.

Already, beekeeping is a preoccupation of over 10,000 active beekeepers in the major honey production areas of North Western Province. There is also some production going on in Northern, Central and Western Province areas of Mpika, Mbala, Chinsali, Isoka, Kaoma, Kabwe/ Kapiri Mposhi on a small-scale basis. There are over 6,000 honey hunters located mostly in Luapula, Central and Western Provinces.

The significance of the honey sector lies in its potential to contributing towards the country's foreign exchange earnings and reducing poverty through job creation. Therefore, Zambia's bee products sector has potential to contribute to income generation and employment creation and also to supplement other economic activities in the rural and urban settings

### ***Past and Ongoing Technical Assistance***

Between 1970 and 1990s, the beekeeping industry received substantial support from the Zambian government and donor agencies in terms of investments. However, after the 1990, the Zambian beekeeping sector underwent deep restructuring. Whereas in the past, government was the main player in the honey sector involved in organizing the beekeepers and marketing honey and beeswax, the scenario changed thereafter. After a series of economic reforms, Government withdrew its direct support from the sector and gradually private sector players stepped in. The honey sector has been characterized by poor sector organization and lack of inter-professional communication during the period the private sector has been the key driver of the honey sector. Government and the private sector have to find a suitable platform for dialogue. Recently, the Zambia Honey Council was formed to organize the honey sector in terms of establishing and strengthening beekeeper groups. The Zambia Honey Council once fully fledged should monitor and coordinate the activities of all the stakeholders in the beekeeping sector. This needs to be supported by effective national and international networking.

Some of major initiatives to promote beekeeping industry particularly in northwestern province are summarized in table1 below.

Table 1: Major initiatives to promote beekeeping industry in Zambia 1970s – 2007s

<b>Organization – Project</b>	<b>Initiative to support beekeeping industry</b>
OXFAM	Oxfam supported the construction of Kabompo Beekeeping Training Centre in Kabompo District. The training centre is under Forestry Department.
Area Development Project – Funded by IFAD	The area development project funded by IFAD supported beekeeping extension in three districts of the NWP namely, Solwezi, Kasempa and Mwinilunga.
Community Based Natural Resources Management Project – Kasempa District	The project supported beekeeping extension in Kasempa District.
Community Environmental Management Project – Mufumbwe District	The project supported beekeeping extension in Mufumbwe District
GRZ-Beekeeping Division, Forestry Department	Provision of Equipment, Beekeeping training, extension and buying
GTZ	Importation of beekeeping equipment and introduction of frame hives
Zambia environmental development	Marketing & Environment
Caritas	Purchasing of Honey
KZF	Training & capacity building
Africare	Training
ZDA	Export promotion
ZATAC Ltd	Finance
SNV	Capacity development
MATTEP	Export finance
USAID/PROFIT	Finance/Training
Agri-Business Forum	Linking finance and advocacy to honey processors, facilitate Bee Keeper group formation

North West Bee Products Ltd	Training and extension & market to Bee keepers
Forest Fruits Ltd	Training and extension & market to Bee keepers

In the case of Northern Province, in the early 2000's the government started supporting the sector through HIPIC funding (2004-05) and pumped in K300, 000, 000 to start training and provision of equipment to beekeeping groups.

In 2005 the government introduced the Forestry Development and Credit Facility Fund. This is a loan facility providing micro, small and medium loans for forestry enterprises development including Beekeeping development. So far the province has had 5 beneficiaries including one for beekeeping.

During the same period the government introduced Joint Forest Management Programme (JFM) where communities can jointly manage protected local forests with the government. This gives an opportunity for communities to utilize the local forest areas near them for beekeeping development.

By 2006 twelve beekeeping groups targeted at 30 households per group were established and trained. Two groups in each of the following districts; Chinsali, Isoka, Mbala, Kasama, Luwingu and Mporokoso were established

### ***Institutional Structure***

Key participants in the sector include the honey sector exporters and producers, the Ministry of Trade, Commerce and Industry, the Department of Forestry of the Ministry of Tourism, the Veterinary Department of the Ministry of Agriculture and Cooperatives, the Export Promotion and International Competitiveness of the Zambia Development Agency(ZDA), the Zambia Bureau of Standards, auditing companies and testing laboratories in Zambia, University of Zambia Food Science and Technology Department, national and international NGOs, such as SNV, SHEMA, MATEP, Keepers Zambia Foundation, the Zambia Honey Council and the North Western Beekeepers' Association, private sector banks, insurance companies, and international organizations, such as the International Trade Centre, UNDP or FAO,

Zambia Environmental council, ZATAC, JICA, Caritas, Local Capacity Builders,  
Zambia Honey Council & Members, MATEP

<i>Stakeholder</i>	<i>Role</i>
<b>Government agencies</b>	
<ul style="list-style-type: none"> <li>Export Board of Zambia</li> </ul>	<i>Export promotion. Facilitation in the branding process.</i>
<ul style="list-style-type: none"> <li>Zambia Bureau of Standards</li> </ul>	<i>Honey and beeswax standards</i>
<b>Government institutions</b>	
<ul style="list-style-type: none"> <li>Forestry Departments</li> </ul>	<i>Extension and training, forest protection and management</i>
<ul style="list-style-type: none"> <li>MACO</li> </ul>	<i>Export licenses, accreditation of organic and fair trade certifiers</i>
<ul style="list-style-type: none"> <li>Ministry of Commerce, Trade and industry</li> </ul>	<i>Trade conventions, WTO regulations etc</i>
<ul style="list-style-type: none"> <li>Local Councils</li> </ul>	<i>Health inspections, trading licenses and honey licenses</i>
<ul style="list-style-type: none"> <li>Forestry Research and Training Institutions</li> </ul>	<i>R &amp; D and training</i>
<ul style="list-style-type: none"> <li>Environmental Council of Zambia</li> </ul>	<i>Environmental standards</i>
<b>Other organisations</b>	
<ul style="list-style-type: none"> <li>Zambia Honey Council</li> </ul>	<i>Representation, lobby and advocacy</i>
<ul style="list-style-type: none"> <li>Keeper Zambia Foundation</li> </ul>	<i>Group mobilization and strengthening.</i>
<ul style="list-style-type: none"> <li>Evangelical Church of Zambia</li> </ul>	<i>Group mobilization and strengthening</i>
<ul style="list-style-type: none"> <li>SNV Netherlands Development Organisation</li> </ul>	<i>Capacity development</i>
<ul style="list-style-type: none"> <li>Northern Bee-Keepers Association</li> </ul>	<i>Lobbying and advocacy</i>
<ul style="list-style-type: none"> <li>Financial Institutions (Finance Bank, Stanbic etc)</li> </ul>	<i>Financial services</i>
<ul style="list-style-type: none"> <li>OPPAZ / EPOPA(z)</li> </ul>	<i>Organic promotion / certification</i>
<ul style="list-style-type: none"> <li>Caritas</li> </ul>	<i>Group mobilization</i>
<ul style="list-style-type: none"> <li>FLO</li> </ul>	<i>Fair trade registration</i>
<ul style="list-style-type: none"> <li>Environment development of Zambia</li> </ul>	<i>Group mobilization</i>

## **SNV PROGRAM RATIONALE OR JUSTIFICATION**

SNV'S support to the Honey sector is based on the premise that it is a rural based high value product and the majority of the people's livelihoods in these areas are still based on wood and non-wood forest products, among which are mushrooms, basketry and honey/beeswax production.

Therefore, SNV's key contribution to this sector will be its ability to increase efficiency and competitiveness of these value chains including improving standards, processing capacity etc for access to higher value niche markets i.e. FLO certification or organic certification. The desired aim of the interventions in the honey sector is to increase the incomes (\$1 a day to \$3 a day), production (60kg/season to 300kg/season) and employment of the beekeepers. Beekeeping provides an economic potential for many rural households to participate in the money economy and can include the participation of men, women and children. Beeswax also offers opportunities as an export by product whose potential remains unexploited. The development of beeswax and other by products' markets would significantly increase the economic benefits from the sector

### ***Problems to be addressed***

SNV-Zambia envisages the following challenges in the honey sector which need to be addressed:

- **Zambian bee products match international phyto-sanitary standards leading to increased local capacity for standards accreditation and certification;**
- **Quality awareness is undertaken along the value chain supported through a quality management and certification system;**
- **Producers are provided with updated information on quality requirements, prices and volumes of major target markets. Buyers have access to information on potential producer networks;**

- Meaningful professional information and support services offered to the honey sector;
- Zambia Honey Council is recognized and as an effective apex body of the honey sector;
- Local supplying industries of critical inputs to the honey sector are in place providing beekeepers with the necessary requirements;
- Beekeepers' Associations are strengthened or created at provincial level;
- Small loans and savings schemes are available and used by beekeepers allowing them to scale up their production activities; and
- SME producers, processors and traders have access to formal credit at reasonable terms and conditions.

## ***Concerns about Poverty, under employment and Unemployment***

High Urban Wood Fuel Energy Demand: The average urban consumption of charcoal has been estimated at 3.9 kg. /day or 1,040 kg./household/year. In 2000, the annual charcoal consumption in Lusaka was estimated at 245,000 metric tonnes (MT), which translated to 15 million cubic metres (m<sup>3</sup>) of wood. With an estimated increase of 100,000 new urban households in Zambia by 2010, it is evident that the demand for charcoal will remain high. A consolidated effort to manage the forest resource in collaboration with the producers, improving the efficiency of charcoal production and enhancing their bargaining power in the market place will, therefore, yield immediate direct economic benefits to the rural poor. Currently 50,000 people are employed in the charcoal sector in urban and rural areas in the country.

In contrast the Bee keeping sector has seen extraordinary performance in some selected provinces of Zambia in recent years. In North Western province alone 10,000 bee keepers are engaged in bee keeping activities. An estimated total of 20,000 bee keepers, of whom the majority are still honey hunters, are in need of support to establish themselves as bee keepers with access to markets for their products.

## **APPRAISAL OF PAST PERFORMANCE OF APICULTURE INDUSTRY**

### ***Income***

Results from selected baseline studies in 2007, show that the average income from beekeeping is around K489, 987.14. However, there is a wide distribution between the highest and lowest earner.

#### Average minimum and maximum incomes per season

Income type	Households	Income (Kwacha)		
		Minimum	Average	Maximum
All sources	811	8,000	884,413.44	17,000,000
From honey	828	5,000	489,987.14	7,000,000

Source; Field survey, 2007, NWP

In Northern Province (with about 503 bee keepers in SNV operational areas) group sales for the year 2006-2007 were at K12, 975,000

The profitability of honey and beeswax is a function of economies of scale. For bark hives, beekeeping and processing into liquid honey, at least 150 fully occupied beehives are determined as the minimum unit of viability. This would result in gross incomes of around K515, 625 per month, which is well above the minimum wage basket of K400, 000 per month. However, most bee keepers have an average of 30 occupied hives, suggesting that the average was below the break even number of 150 bee hives.

It is estimated that 80% of the honey production is consumed locally. Therefore most of the available data is on export markets. During 2005, the honey sector export earnings of honey and beeswax declined by 34 % from US\$ 825,422 in 2004 to US\$ 544,501 in 2005. The decrease in the exports in 2005 was due to the appreciation of the local currency, Kwacha by 30%, which reduced the profitability of the honey net exporters such as North Western Bee Products and Forest Fruits Zambia whose costs are predominantly in Kwacha and therefore not affect a corresponding dollar price increase on their products. The honey sector reached its peak as a result of increased production due to favorable climatic factors and favorable prices during 2004.

The following table below indicates the export earnings in the honey sector for the past five years.

SECTOR	2001	2002	2003	2004	2005
	US\$	US\$	US\$	US\$	US\$
HONEY & BEESWAX	86,595.90	233,104.90	455,742	825,422	544,501

The main markets for bee products in the past five years continue to be United Kingdom (55%), Germany (35%) and South Africa (5%) with re exports to France, Holland, Norway and Belgium. Other markets (5%) have been Botswana, Libya, Tanzania and Zimbabwe. Honey and beeswax products have great market potential in Canada, Middle East, Japan and the United States of America where honey promoters must be encouraged and motivated to continue exploring both export and value addition opportunities. Efforts are under way to encourage local packaging companies to invest in glass bottling and plastic moulds that would allow promoters moving into table honey exports.

### ***Employment***

According to the Zambia honey sector strategy, the sector has an estimated 20,000 beekeepers through out the country producing an average of 600 metric tones of marketed honey yearly. It is important to note that 70% of the beekeepers are in North Western Province. The sector engages both women and men. According to the 2007 baselines (NWBKA), beekeeping is a male dominated sector with 34.4% female participation. Baseline results indicate that, the bee industry is mainly dominated by males in most areas especially in the production, baiting and hanging of hives and a little bit of female participation in processing. This is so because women cannot climb trees to hang the hives. Unlike men who practice beekeeping as individuals the female beekeepers practice in groups.

It is more costly for females to engage in beekeeping because the activity is labour intensive which disadvantages them participation as they are unable to climb tall tress, construct beehives and crop unassisted. Women have to hire labor to do such activities whilst men are able to do such activities on their own. As a result, female beekeepers incur average production costs that are 28% higher than that of the men

## ***Associations and Cooperatives***

The exact number of beekeepers (organized and unorganized) in all the provinces is not yet known although it is estimated to be 20,000. The number can only be established through a census (an interview of all the households in the provinces). It is estimated that the number of organized beekeepers in NWP is about 7,500 as of January, 2007 divided in 33 routes under Northwestern bee keepers association. There are also five (5) bee keeper groups in Mpongwe-Masaiti with a total membership of over 1000, mainly organized around Mpongwe bee keeping enterprises. In Northern Province, the total number of beekeeping groups and none members in SNV operational area is 503. The lowest number is in Mungwi with 40 beekeepers while the highest is 118 beekeepers in Isoka because of assistance from ASP and Forest Department who funded the groups by providing production equipment.

Mpika is the second with 101 beekeepers because initially beekeeping was introduced in the early 2002 by Economic Expansion and in Outlining Areas (EEOA) and later Environmental Support Programme. Now ASP is supporting the same groups left by these two organizations. Mbala follows with 98 members, Kasama 96 members and Chinsali with 50 members. In western province there is an association of bee keepers in Kaoma. Generally most of these associations/cooperatives still lack adequate capacity due to low membership (fees), lack of auditing systems, bulking capacities and other logistical challenges.

## ***Enterprises***

The main drivers in terms of marketing are the private companies although some NGOS are also providing some markets to bee keepers. Private companies actively engaged include, Forest fruits, NWBP and Mesh Enterprises in North western province, Mpongwe beekeeping and speciality foods on the copperbelt, Liyunda enterprises in Western province.

In Northern Province, there is currently only one organized buying company in the Province. Lua lua Beekeeping Cooperative based in Kasama. The cooperative buys both comb and liquid honey which it processes and bottles.

A new company Greenbelt Enterprises has joined the trade as one of the major buyers and whole sellers.

Apart from Lua-lua there are other private individual traders who buy honey from the field and sells to Lua-luo Cooperative. North Luangwa Project buys and sells produce from its beekeeper groups.

### **LOCAL HONEY BUYERS –Northern Province**

<b>Actor / Company</b>	<b>Location</b>	<b>Area of Operation</b>
Lua-luo Co-operative	Kasama	Mpulungu, Kaputa, Kasama & Mbala
Greenbelt Enterprises	Kasama	Munkonge-Chilufya-Kasama
North Luangwa	Mpika	North Luangwa
PAM COMACO	Chinsali	Chief Nkula & Chibesakunda
Mr. Machangwa Kaoma	Mpulungu	Chibwika
Mr. Kabwe Leonard	Kaputa	Nsama
Mr. Daniel Kalumbi	Mpulungu	Chitimbwa

There are also a number of traders in the sector participating in the buying and selling of honey. In terms of sector development, most of these enterprises lack adequate capital to invest in more value addition technologies such as candle making, acropolis, etc and are not getting full value from bee products.

## ***Production Volumes***

The current beekeepers can be harnessed to produce in total 2,000 metric tons of traditional and organic natural honey within two years from the current levels of 600 metric tones at a conservative production of 100 kg per beekeeper on a yearly basis.

Production levels per season per person

<b>Product</b>	<b>Average figure</b>	<b>Mode</b>
Honey	123 kg	124 kg
Wax	6.5kg	0
Beehives	61	50

Source: field survey, North Western Province, 2007

The production level of the beekeepers seems to be generally low. The rate of production observed in the baselines also appears to be low when compared to the findings of the sub sector analysis.

Yields from various types of hives

<b>Yield per beehive</b>	<b>Comb honey (kg)</b>	<b>Liquid honey (kg)</b>	<b>Wax (kg)</b>
Maximum	20	10	2.5
Average	15	7.5	2.5
Minimum	10	5	2.5

Source: Field survey, Northern Province, 2007

The rate of production depends on the technology being used. All the participants of the baseline use traditional beehives mainly due to the unaffordable cost of the modern hives. The adaptation of improved frame beehives technology increases productivity by at least 50 %. In addition when comparing frame hives and traditional beehives the gross margins are 75% and 65% in the worst cases.

## **Quality & Standards**

According to the Zambia honey strategy, (December, 2006), Zambian honey is of very good quality. However, poor cropping and processing techniques can spoil the quality. To produce quality honey requires improvement in the harvesting techniques, post-harvest handling, packaging, storage and transport of bee products. At the moment, these are not easily attainable in Zambia.

Key enablers for a quality assurance system include a traceability system that may include coding at the point of origin for honey that meets the field standards during purchase at either collection points or bulking centres following a “farm to table” approach for food safety standards.

A seal of quality program is currently being implemented by the Zambia Honey Council that involves the whole honey value chain (from farm to table). At each level, there are quality requirements for products to be released onto the market. The seal of quality has been initially implemented with work undertaken by the Zambia bureau of standards, honey producers in Kaoma and Kapiri Mposhi. By up scaling the quality assurance system along the honey value chain, the production of high quality honey and beeswax can be attained that will enhance the access to opportunities in the market both regionally and locally..

In addition, Zambian honey from certified production areas is free of pollution that emanates from agricultural chemicals and pesticides used to fight bee pests and diseases. Zambian honey has the potential to fulfill all organic and phytosanitary standards. However, local auditing and certification capacity is missing including the testing by local laboratories who are not recognized internationally. This provides a trade barrier for accessing international markets and options for conversion from soil association to ecocert become important to reduce the costs for administration for such certification without losing the organic status and recognition for those enterprises that seek certification status.

Finally, the packaging material currently used for Zambian honey is unsuitable due to its inferior quality. The local packaging industry can neither provide the honey sector with sufficient storage containers/ drums at reasonable prices nor offer attractive

and convenient jars of retail size. Currently, packages are made from plastic material that renders a high value product inferior and fraught with hygienic problems.

### ***Management***

Models of producer organisation are related to the private company that the producers are linked to.

The association model, for instance is linked to NWBP. The other modality of producer associations is that of a depot model. This is championed by FF and a number of other enterprises. On a national perspective, the out grower/depot model is conveniently practiced. The organizations of the producers are mainly tailored to suit the buyer's interest. This is to be able to bulk up and offer economies of scale to the buyers. Whilst this function is quite important, it is felt that producer organizations should be able to represent and applaud their interests' i.e. the collective position for effective bargaining in the value chain.

The conclusion is obvious that organisational and management strengthening of the producer groups is a prerequisite for the development

### ***Technology***

Most of bee hives used by the communities in the districts are traditional (bark) bee hives particularly in Northwestern province. In Northern Province and the copperbelt, modern top bar hives are used. The continuous use of traditional bark hives is a threat to the environment in terms of cutting down trees. On the other hand modern methods of bee keeping (using modern hives) promote production and forest conservation. In terms of upgrading technology, little is being done and most of the honey is exported as raw materials.

### ***Skills***

According to the draft copy of the Beekeeping report of June 2000 by FRMP<sup>1</sup>, 4,854 beekeepers were trained in various fields in Northwestern province. In addition to participating beekeepers, employed production promoters also received training as well as the beekeeping animators. Animators were selected by the communities and were trained in order to become village trainers. However, it appears that most animators do not exist any more or were not even known by beekeepers.

Types of Training that have been undertaken in the past (NWP)

Type of training	Members participating	
	Number	Percent
Honey and Bees wax processing	1,506	31
Candle making	1,041	21
Top bar hive making	970	20
Top bar hive management	772	16
Exchange visits	295	6
Brick hive making	185	4
Honey vending	85	2
Total	4,854	100

Source: FRMP report of activities 2003- 2005

Type of Training received (NP)

District	Total Members	Type of Training		Total Trained	%
		Bark Hive Mgt	Frame Hive Mgt		
Kasama	96	41	34	75	78.1
Mpika	101	0	167	167	165.3
Chinsali	50	0	60	60	120.0
Isoka	118	0	60	60	50.8
Mbala	98	0	66	66	67.3
Mungwi	40	0	34	34	85.0

Total	503	41	421	462	91.8
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Source: Baseline survey, NP-2007

### ***Extension services***

In most cases bee keeping extension services are supposed to be provided by the forest department. Due to large catchment areas, this is no longer sustainable and in most areas such services are non-existent. Forestry departments face logistical challenges and most of their skilled staff is not readily available.

### ***Policy Environment***

Baseline surveys reveal that rural communities themselves are responsible for all environmental management programmes and the need to encourage early burning and conduct community awareness raising campaign on environmental issues.

The National Bee Keeping Policy is in draft form and the Zambia Honey Strategy was launched last year.

## **EXPECTED END OF PROGRAM SITUATION (2010)**

### ***Overall Goal***

The overall goal of SNV Zambia Honey Value Chain Program is to contribute to an increase in the competitiveness of the honey value chain on the regional and global market by enhancing the value of the domestic market. By increasing the productivity of producers, enhancing the efficiency of honey supply, improving the efficiency of processors, quality of honey and co-ordination amongst actors the Honey value chain after two years would potentially have grown and offer greater value to all the actors in the sector.

## ***Focus Areas***

The SNV Zambia Honey Value Chain Development Program has a total of five specific objectives;

1. Contribute to an increase income of 15,000 bee keepers from \$0.1 to \$0.54 a day<sup>2</sup>
2. To contribute to an increase in the production capacity of 15,000 Bee keepers from 60k/g to 300kg per honey production season by 2010
3. To facilitate 20 Market Linkages for Producers and Processors of beeswax and honey worth \$1,000,000 by 2010
4. To broker funding for the Zambian Honey value chain worth \$200,000 by 2010
5. To promote corporate governance and responsibility in the Honey Value Chain by 2010 by establishing 3 stakeholder forums at provincial level, facilitating fair trade registration and practices, revitalizing the co-operative audit system in 3 provinces and mainstreaming HIV/AIDS issues into the sector.
6. To establish Quality Management and Honey certification systems in 3 provinces by 2010 by producing local language brochures on Honey standards & guidelines and establishing a network of certified standards officers at provincial level.

## ***Strategy***

The SNV Zambia Honey Value Chain Development strategy is essentially three pronged;

- i. It aims to stimulate the competitiveness of the local apiculture industry as a means of increasing its participation in domestic, regional and global markets by building the processing and marketing capacity in the country

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<sup>2</sup> Final 2007 beekeeping survey report and baseline report for Northwestern province provide production current figures of between 20 kg -123 kg of honey per season

- ii. It aims to increase honey production volumes in the country by building the capacity of bee keepers to produce higher volumes of quality honey on a consistent basis onto the local and international market
- iii. Strengthening co-ordination capacity in the value chain at national, provincial and district levels. By strengthening the Zambia Honey Council, establishing provincial stakeholder forums and district level bee keeper co-operatives SNV believes organization, dialogue and collaboration in the value chain will be enhanced.

It hopes that through this three pronged strategy it will be able to stimulate processing of honey and beeswax domestically and therefore create more local value that could be easily exported as well as encourage producers to view Bee keeping not only as seasonal income stream, but a viable business that could yield substantial returns if managed viably.

The availability of more quality honey on the domestic market including increased processing capacity should stimulate the creation of more jobs domestically and result in increased revenue for the Zambian economy and government.

### ***Target Beneficiaries***

The targeting is on the premises that in the private sector goods and services move from the original producer to the consumer through a series of intermediary transactions. That set of transaction is referred to as a supply chain. Value is added to the product at each link in the chain by activities such as processing, marketing and distribution. The buying and selling of the value added products is facilitated all along the supply chain by service providers (transportation, insurance, finance, etc). The more service providers there are, and the more buyers and sellers there are, in a supply chain the stronger and more efficient the market will be. The fewer the participants in a supply chain, the weaker the market. Furthermore, a supply chain (or value chain) is only as strong as the weakest link. By strengthening the weakest link all participants can benefit. If SNV can assist a retailer, distributor, or processor in improving their operations the benefits can reach primary processors. In other words SNV will **work with the private businesses and business associations that will have the greatest potential to improve supply chains and benefit**

**the largest number of people.** If the intermediaries are weak no amount of assistance to the primary producers will produce tangible results in reducing poverty.

By strengthening the weakest link all participants can benefit. Thus SNV Zambia has deliberately chosen to work with the private businesses (including farmer owned) and cluster groups that will have the greatest potential to improve supply chains and benefit the largest number of people

The SNV Zambia Honey Value Chain Development Program envisages the following direct and indirect beneficiaries;

- a. A Total of 15,000 Bee keepers based in North western, Northern and Western provinces of Zambia,
- b. A total of 14 member client portfolio namely; 8 Bee keeper co-operative unions based in Northern, North western and Western provinces, the Zambia Honey Council and 5 Honey and bees wax processing/exporting firms,
- c. Indirect program beneficiaries include Local capacity builders such as the Agri- Business Forum, Zambia Forestry College, UNZA Institute of National Industrial Research and the School of food Science & Technology,
- d. Indirect program Policy makers namely; the Ministry of Tourism & Environment, the Ministry of Agriculture and Co-operatives, Ministry of Commerce and Trade.

### ***REASON FOR SNV SECTOR INTERVENTION***

SNV Zambia has seen the need to intervene in the Honey Value Chain because of the following factors;

- The need to enhance the competitiveness of the value chain through efficiency and quality improvements especially in light of the increased global competition
- The need for improved co-ordination and regulation in the sector so that all stakeholders particularly Honey processors and Bee Keepers' needs can be heard and met

- The need to stimulate the rural economy and create jobs as well as share wealth from earnings along all segments of the value chain

## **SNV DEVELOPMENT GOAL (OBJECTIVE)**

SNV's overall objective in the honey sector is to contribute to an increase in income of 15,000 bee keepers from \$1 to \$3 a day from honey and bee products, increase their production capacity from the current average of 60 kg/ to 300kg per season, stimulate the efficiency and competitiveness of the honey value chain by improving standards, processing capacity so as to access higher value niche markets through FLO certification or organic certifications and to achieve a total sales value of \$1,000,000 by 2010.

## **DESCRIPTION OF ACTIVITIES**

For purposes of this program, "consumers" include buyers and sellers of product throughout the honey value-chain. These consumers form the critical linkages that move honey through the components of the value-chain: input suppliers link to producers; producers link to processors; processors link to distributors, retailers and end consumers.

SNV Zambia has focused development resources on creating improved, efficient flow of quality honey and bee products and related services through the value-chain resulting in the ability of the system to more competitively meet consumer demand. The state of the honey industry has dictated a greater emphasis of development funds on assisting farmers to increase production. This assistance needs to be continued while balancing the development emphasis on marketing and promotion as well as improving processing efficiencies throughout the farm-to-consumer system.

Without market expansion, Zambia's apiculture industry will have limited success in increasing economic development opportunities and expanding participation in the industry by stakeholders. When a value-chain's linkages are improved, cost competitive, quality products and services are generated and move markets. Market expansion results in increased revenue that is funneled back into the system as investment in new technology, capacity and hiring of employees – all necessary to meet new demand for products and services.

## ***Immediate Objectives, Expected Outcomes, Outputs and Activities***

### **Objective 1. Increase production capacity of Bee keepers**

Expected results/ Outcome	Activities	Budget Euros	Means and verification	Risks
1. Bulking and collection systems established	<p>1. Facilitate the mapping and classification of producer groups.</p> <ul style="list-style-type: none"> <li>• Facilitate geographical mapping exercise around associations and groups providing honey to enterprises along selected supply chains</li> </ul> <p>2. Facilitate the establishment of bulking centers.</p> <ul style="list-style-type: none"> <li>• Facilitate the establishment of collection points in mapped areas</li> <li>• Facilitate the organization of producers around collection and bulking centres</li> <li>▪ Disseminate and provide training for sms trade and market information system at bulking and collection points</li> </ul>	25,000	Producer production maps in key supply chains available	<p>Time constraint to carry out mapping including low utilizations by buyers and service providers.</p> <p>Risk of non ownership by producers in setting up and running collection and bulking centers</p> <p>Absence of accurate industry data.</p> <ul style="list-style-type: none"> <li>-production volumes</li> <li>-output levels</li> <li>-market data.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Source technical support for training on bulking centre concept for producers.</li> </ul> <p>3. Facilitate resource mobilization to enable operational capacities of the producer groups.</p> <ul style="list-style-type: none"> <li>▪ Facilitate producer sensitization on issues of bulking and cost efficiency including the development of suitable ways of disseminating availability market information , e.g. exchange visits to information center's, mobile information services</li> </ul> <p>4. Facilitate market linkages to feed into the bulking systems e.g. producer groups contract with processors.</p> <ul style="list-style-type: none"> <li>▪ Facilitation of the development of contracts between producers' members and buyers.</li> <li>▪ Facilitate management training for bulking centre operators.</li> <li>▪ Mechanism for Monitoring and Evaluation</li> <li>▪</li> </ul>			
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<p>2. Bee Keeper Extension System Established</p>	<p><b>1.</b> Facilitating extension services provision by engaging relevant stakeholders e.g. MTENR, MACO, Zambia Forestry college and NGOs providing training.</p> <ul style="list-style-type: none"> <li>• Develop terms of reference to engage an LCB to train extension providers on TOT.</li> <li>• Train community extension workers [2-4 per bulking centre comprising of 60 bee keepers</li> <li>• Equipping of the community extension workers with basic tool kit</li> <li>• Facilitate the development of localized compensation support systems around bulking and collection centers for community extension workers</li> </ul>	<p>19,000.</p>	<p>Changes in post harvest and production parameters in key supply chains and baseline data</p>	<p>Lack of monitoring and regulation of bee keepers by the Forestry Department due to financial and human resource constraints</p>
<p>3. Bee keeper cooperative formation and strengthening</p>	<p>1. Engage an LCB on co-operative strengthening, with TA support of the MTENR, SIDA and MACCO.</p> <ul style="list-style-type: none"> <li>•</li> </ul>	<p>22,000</p>		
<p>4. Input supply system developed</p>	<p>1. Facilitate the development of an input supplier system for buckets, packaging materials</p>	<p>10,000.</p>	<p>input supply directory</p>	<p>Low utilization of input suppliers. Information</p>

	etc. <ul style="list-style-type: none"> <li>▪ Facilitate the development of input supply directory.</li> <li>▪ Disseminate the directory of input suppliers to key information network providers.</li> <li>▪ Facilitate the linkage of producers to input suppliers in various districts along established supply chains</li> <li>▪ Facilitate Input supplier trade shows in the districts.</li> <li>▪</li> </ul>			network system and database
Sub-Total		76,000		

**Objective 2: 20 market linkages facilitated for producers and processors for beeswax and table honey: \$1.000.000 by 2010.**

Expected Results/Outcome	Activities	Budget Euros	Means and verification	Risks
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1.Domestic Market Profile	<ol style="list-style-type: none"> <li>1. Undertake a Zambia Honey sector market analysis.</li> <li>2. Hire a consultant/LCB to Identify medium and large scale domestic buyers and markets.</li> <li>3. Develop a market database for domestic buyers to complement Zambia Honey council input to sms market information system</li> </ol>	5,000	<ul style="list-style-type: none"> <li>▪ Domestic market profile done and disseminated to key implementing agencies.</li> <li>▪ Market database done</li> </ul>	Lack/Low utilization of the domestic market profile.
2.Regional market profile	<ol style="list-style-type: none"> <li>1. Hire a consultant to identify medium and large scale regional and international buyers</li> <li>2. Compilation of regional market requirements and specification information.</li> <li>3. Develop a market database of regional and international buyers.</li> <li>4. facilitate Fair trade certification</li> </ol>	15,000	<ul style="list-style-type: none"> <li>▪ Regional market Profile done and disseminated to key implementing agencies.</li> <li>▪ Document on market specification and requirements compiled</li> <li>▪ Database completed</li> </ul>	Lack/Low utilization of the regional market profile.
3.Market and business Linkages	<ol style="list-style-type: none"> <li>1. Sell of \$ 500,000 worth of Honey on the domestic market</li> </ol>	10,000	8 co-operatives	<ul style="list-style-type: none"> <li>▪ Low production volumes to</li> </ul>

<p>Brokered</p>	<p>Identification (audit) of honey producer Association/co-operative capable of responding to export market demands.</p> <ul style="list-style-type: none"> <li>• Engage LCB's to build capacity in producer orgs/co-operatives to be able to solicit and negotiate domestic and export orders.</li> <li>• Facilitation of buyer seller meetings</li> </ul> <p>2. Sell of 500,000 worth of Honey/Beeswax on the regional market</p> <ul style="list-style-type: none"> <li>• Identification (audit) of honey producer association/co-operative capable of responding to market demands.</li> <li>• Engage LCB's to build capacity in producer orgs/co-operatives to</li> <li>• Be able to solicit and negotiate export orders.</li> <li>• Increase in sales and revenue, forecasting, planning, Profit/loss statements in record keeping</li> <li>• Facilitation of buyer</li> </ul>	<p>15,000</p>	<p>linked to regional and domestic markets.</p> <p>LCB's terms of reference drafted and hired.</p> <p>Terms of reference for consultant drafted and consultant hired.</p> <p>8 co-operatives fulfilling domestic and export orders.</p> <p>Sales and revenue forecast plans developed by co-operatives. Record keeping being</p>	<p>fulfill orders.</p> <ul style="list-style-type: none"> <li>▪ Buyer producer relationships don't result in trade transactions</li> <li>▪ Long distances to the market resulting in uneconomic benefits</li> <li>▪ Poor road and communication infrastructure.</li> </ul> <p>Lack of baseline information showing current total sales and revenues for beekeepers</p>
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	seller meetings.		implemented	
Sub-Total		40,000		

**Objective: 3 Financing for honey value chain \$200,000**

Expected results/outcome	Activities	Budget	Means and verification	Risks
1. Beekeepers accessing finance	1. Financial Needs identified 2. Financial service providers survey 3. Feasibility Study <ul style="list-style-type: none"> <li>• Develop TOR</li> <li>• Contract LCB</li> </ul> 4. Business Plan Development <ul style="list-style-type: none"> <li>• Profit and loss analysis</li> <li>• Cash flow projections</li> <li>• Return on investment analysis</li> </ul> 5. SACCOS Development <ul style="list-style-type: none"> <li>• Sensitization</li> <li>• Mobilization</li> <li>• Registration</li> </ul>	2,727  6,000.  22,000  8,500  5,500	Financial service providers surveys done	Lack of commitment by bee keepers and processors to manage finances.
Honey/Bee Wax Processors/Exporters Access Financing	1. Needs identified 2. Financial service providers survey 3. Feasibility Study <ul style="list-style-type: none"> <li>• Develop TOR</li> <li>• Contract LCB</li> </ul> 4. Business Plan Development <ul style="list-style-type: none"> <li>• Profit and loss analysis</li> <li>• Cash flow projections</li> <li>• Return on investment analysis</li> </ul>	2,727 1,500 15,000 21,000	Financial survey done	Lack of adequate management capacity and accountability

Input Providers Accessing Finance	1. Needs identified <ul style="list-style-type: none"> <li>▪ Financial service providers survey</li> <li>▪ Feasibility Study</li> <li>▪ Develop TOR</li> <li>▪ Contract LCB</li> </ul> 2. Business Plan Development <ul style="list-style-type: none"> <li>▪ Profit and loss analysis</li> <li>▪ Cash flow projections</li> <li>▪ Return on investment analysis</li> </ul>	2,727  1,500  8,250.	Financial survey done	Lack of adequate management capacity and accountability
Sub-Total		97,431		

**Objective 4: Promoting Good Governance and responsibility in the Honey value chain**

Expected results/outcome	Activities	Budget	Means and verification	Risks
1. Honey stakeholders Meeting	1. Validate SNV Zambia Honey Value Chain Program	6,000		
2. Stakeholder forums at Provincial and national level to coordinate and regulate the honey sector	1. Facilitate coordination between MTENR, MACO and MCTI, ZDA, ZHC	1000	Number of forums and reports	Identification of appropriate stakeholders  Lack of capacity to implement resolutions.
	2. Organize stakeholder forums to promote dialogue at Provincial and national level 3. Draft an actor constellation for district , provincial and national level 4. Support the Forestry Department in establishing the forums 5. Disseminating national beekeeping policy, honey standards, Zambia Honey strategy	9,600		
3. Bee keepers represented and heard at National and provincial levels	1. Provide capacity development support to the Zambia Honey Council 2. Member mobilization at district level 3. Strengthen lobby and capacity 4. Facilitate evidence based research in the sector	10,000	No of forums at national level	Inability to implement policy.

	<p>5. strengthen capacity of ZHC resource mobilization for the sector</p> <p>6. Strengthen the executive and governance practice of the ZHC</p>	20,000		
4. Bee keeping Cooperative auditing system established	<p>1. Engage consultant to carry out a needs assessment to establish gaps in auditing process of co-operatives.</p> <p>2. Strengthen the capacity of department of cooperatives to carry out audits in a timely manner</p> <p>3. 8 Honey co-operatives being audited by 2009</p>	7,000  10,000	Client and consultant reports	Non adherence to audit guidelines.
5.HIV/AIDS mainstreamed in bee keeping Cooperatives and processors	<p>1. Assess HIV/Aids transmission and mitigation factors in the sector</p> <p>2. Engage consultant to carry out assessment</p> <p style="padding-left: 40px;">a. for producers and</p> <p style="padding-left: 40px;">b. processors</p> <p>3. Facilitate the development of a mainstreaming strategy and implementation plan</p>	5,000  10,000.	Client and consultant reports	Time constraints and interference with client core business activities
Sub-Total		78,600		

**Objective 5: Establish a Quality Management and Certification System for Honey**

Expected results/ outcome	Activities	Budget Euros	Means and verification	Risks
1. Dissemination of the honey standards and certification guidelines	1. Facilitate publication of honey standards and certification guidelines <ul style="list-style-type: none"> <li>▪ Produce brochures for cooperatives for honey standards and guidelines</li> <li>▪ PR/Sensitization on the Zambia Honey Standards</li> </ul>	4,000.	Honey standards published in brochures and distributed to 8 co-operatives	Lack of utilization of honey standards and certification guidelines.
2. Build Capacity of bee keepers to comply to established standards and meet certification requirements	1. Support and broker training and service provision to improve the harvesting and post-harvest handling and quality awareness of selected producers along the value chain 2. facilitate certification of production for organic and fair trade 3. facilitate fair trade registration be ensuring among others that producers become aware of the fair trade and organic certification dynamics 4. facilitate training and	10,000	Compliance system developed within co-operatives.	Lack of compliance.

	producer organization on fair trade, organic or ecocert practices			
Sub-Total		27,000		
Grand-Total		319031		

## **INPUTS**

SNV is investing a total of 319,031 euros towards attaining program activities and four staff to the realization of these program objectives.

## **RISKS**

### ***External Factors***

The Apiculture industry is expanding slowly in Zambia which is a good thing as the competition in the market offers the bee keepers alternative markets and it is assumed a better market price. However, fair market prices for honey and other bee products can only be accessed through fair trade and/or organic certification which is often a costly and lengthy process, in which not all producer groups are able to engage (i.e. they lack reliable communication, knowledge about markets etc.). Despite the entry of new firms on the market, the position of bee products on the local market still remains rather limited.

The market for honey has long been the biggest challenge bee keepers' face in the country and unless this is addressed volumes for trade will be compromised.

Finally, the huge risk posed by deforestation by the charcoal industry and rapid forest depletion threatens the sustainability/viability of this sector as a whole.

## REPORTING, INDICATORS, REVIEWS AND EVALUATION

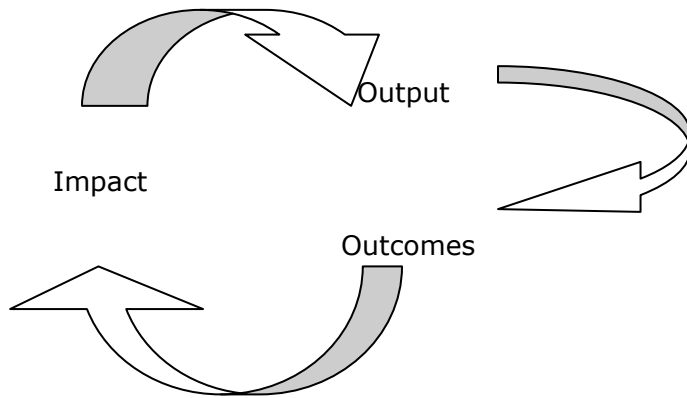
### Key Performance Indicators

<b>Key Performance Indicators</b>	<b>Baseline 2007</b>	<b>MA 2008</b>	<b>SP 2009</b>
Increase outreach of Client Organizations	6,503 bee keepers (90% in North western Province)	8,000 bee keepers	10,000 bee keepers
<b>Increase quantity and quality of bee products complying with international standards</b>	Production 100 kg. per bee keeper per season	200 kg. per bee keeper per season	300 kg. per bee keeper per season
Create access to relevant markets, disseminate market information and make the Zambian honey visible at international and regional markets	\$600,000	\$ 800,000	\$ 1,000,000
<b>Improved Enabling Environment</b>	Zambia Honey Standards finalized and launched	Certification guidelines disseminated Provincial stakeholder forums established	Export procedures streamlined
<b>Improved coverage of SNV clients</b>	6,000	8,000	10,000
<b>Income per Bee Keepers per production day per annum</b>	\$1	\$2	\$3
Financial resources Mobilized for Bee Keepers	\$70,000	\$75,000	\$200,000
Number of linkages facilitated with the private sector	3 \$50,000 sales value	10 \$300,000 sales value	20 \$1,000,000 Sales value

### Monitoring Cycle

SNV has a Result management cycle in place that monitors progress on its impact targets. In brief the Result Management Cycle monitors results as highlighted by figure below;

**Figure 1**



SNV monitors quality of its advisory process against its outputs i.e. reports, business plans and research studies. Outcomes must result out of a series of well structured activities and outputs. A number of planned outcomes will yield desired impact results.

Additional guiding principles to be applied during implementation include:

- Interconnectivity and consistency with preceding phases to facilitate scaling-up and deepening Program impacts;
- Public-private partnerships to enhance the process of learning lessons, developing and strengthening capacities of local institutions and leveraging support for continuity of activities by local institutions upon the decision to withdraw Program activities at some time in the future;
- Holistic and multidisciplinary approach to resolving traditional and non-traditional constraints in the apiculture industry; and
- Generating compelling evidence through a sufficiency of numbers of households who benefit from and are involved in the apiculture business, leading to sustainable growth.

### ***Reporting Arrangements***

SNV Zambia has a bi-annual reporting cycle where progress is reported formally twice a year to its regional and corporate offices. In this regard all participants in this program will have to report on; their satisfaction of SNV advisory services, the

learning they have gleaned from the interaction with SNV and the realization of agreed targets set with the organization.

The reports will be submitted by respective clients through the four SNV Zambia country program offices based in; Lusaka, Mongu, Solwezi and Kasama.

SNV program coordinators who lead and manage the country program will visit respective clients on a regular basis to get feed-back on progress.

### ***Program Reviews and Program Evaluation***

The SNV Zambia Honey Value Chain Development Program will hold annual provincial stakeholder review sessions to monitor and report on progress and results.

A two pronged program evaluation is anticipated by the second quarter of 2010. The Program evaluation will be carried out by firstly SNV evaluators from regional/corporate levels to draw key lessons & results. Another team of program evaluators is anticipated, by independent evaluators contracted by SNV regional/corporate offices to ascertain the levels of direct and indirect impact realized by the program.

**Annex 1 Value along the chain per/kg**

Producer Value  
7,000 kwacha  
\$2

Trader Value  
8,000 kwacha  
\$2.50

Processor Value  
9,000-12,000  
kwacha \$3-\$4.50

Wholesaler/Retailer  
Value  
25,000 kwacha  
\$6.50

Exporter Value  
7,000 kwacha  
\$2

ANNEXES WORK PLAN

Year	2008				2009			
	1	2	3	4	1	2	3	4
Objective 1. Increased production capacity of bee keepers.								
<b>Outcome 1.1 bulking and collection system established</b>								
1.1.1 Mapping and classification of producer groups	X	X						
1.1.2 Establishment of collection points in mapped areas		X	X					
1.1.3 Establishment of bulking centers	x	x	x					
1.1.4 Organization of producers around collection and bulking centers		X	X					
1.1.5 Source TA for training on bulking center concept		X						
1.1.6 Management training for bulking centre operators.		X	x	x				
1.1.7 Resource mobilization for bulking center operations	X	X	X					
1.1.8 learning for producers via exchange visits		X	X	X				
1.1.9 market linkage along supply chains		X	X	X				
<b>Outcome 1.2 .Bee Keeper Extension System Established</b>								
1.2.1 Engage extension service providers for training delivery	X	X	X	X				
1.2.2 Engage LCB for cooperative strengthening Technical support								
<b>Outcome 1.3 Bee keeper cooperative strengthening</b>	X	X						
1.3.1 Engage an LCB on co-operative strengthening with TA support of the MTENR, SIDA and MACO	X	X						

1.3.3 Training of cooperative business management and planning			X	x				
<b>Outcome 1.4 Input supply system developed</b>	X	X	X	X				
1.4.1 Facilitate the development of an input supplier system for buckets, packaging materials etc.		x	X					
1.4.2 Facilitate the development pf input supply directory		X						
1.4.3 Facilitate the Linkage of producers to input suppliers in various districts along established supply chains		X	X					
1.4.4 Facilitate input supplier trade shows in the districts	X	X						

Year	2008				2009			
	1	2	3	4	1	2	3	4
Objective 2 market linkages facilitated for producers and processors for beeswax and table honey,\$1.000.000 by 2010								
<b>Outcome 2.1 .Domestic Market Profile</b>								
Undertake a Zambia Honey sector market analysis.	X	X	x					
2.1.1 Develop market data base for domestic buyers and market		X	X					
<b>Outcome 2.2 Regional market profile</b>		X	X					
2.2.1 Hire a consultant to identify medium and large scale regional and international buyers	x	x	x					
2.2.2Compilation of regional market requirements and specification information	X	X	X					
2.2.3 Develop a market database of regional and international buyers		X	X					
<b>Outcome 2.3 Market and business Linkages Brokered</b>								
2.3.1 Sell of \$ 500,000 worth of Honey on the domestic market	X	X						
2.3.2 Sell of 500,000 worth of Honey/Beeswax on the	x	x	x					

regional market									
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Year	2008				2009			
Quarter	1	2	3	4	1	2	3	4
Objective 3 Financing for honey value chain								
<b>Outcome 3.1. Beekeepers accessing finance</b>								
3.1.1. Financial Needs identified	X	X						
3.1.2 Financial service providers survey		X	X					
3.1.3 Feasibility Study	x	x	x					
3.1.4 Business Plan Development at producer level	X	X	X					
3.1.4 SACCOS Development		X	X	X				
<b>Outcome 3.2 Honey/Bee Wax Processors/Exporters Access Financing</b>								
3.2.1 Needs identified	X	X						
Financial service providers survey	X	X						
3.2.3 Feasibility Study	x	x	x					
3.2.4 Business Plan Development								
3.2.5 SACCOS Development			X					
<b>Outcome 4.1 Input Providers Accessing Finance</b>								
4.1.1 Needs identified		x	x					
4.1.2 Financial service providers survey		X	x					
4.1.3 Feasibility Study		x	x					
4.1.4 Business Plan Development			x					
4.1.5 SACCOS Development			x	x				

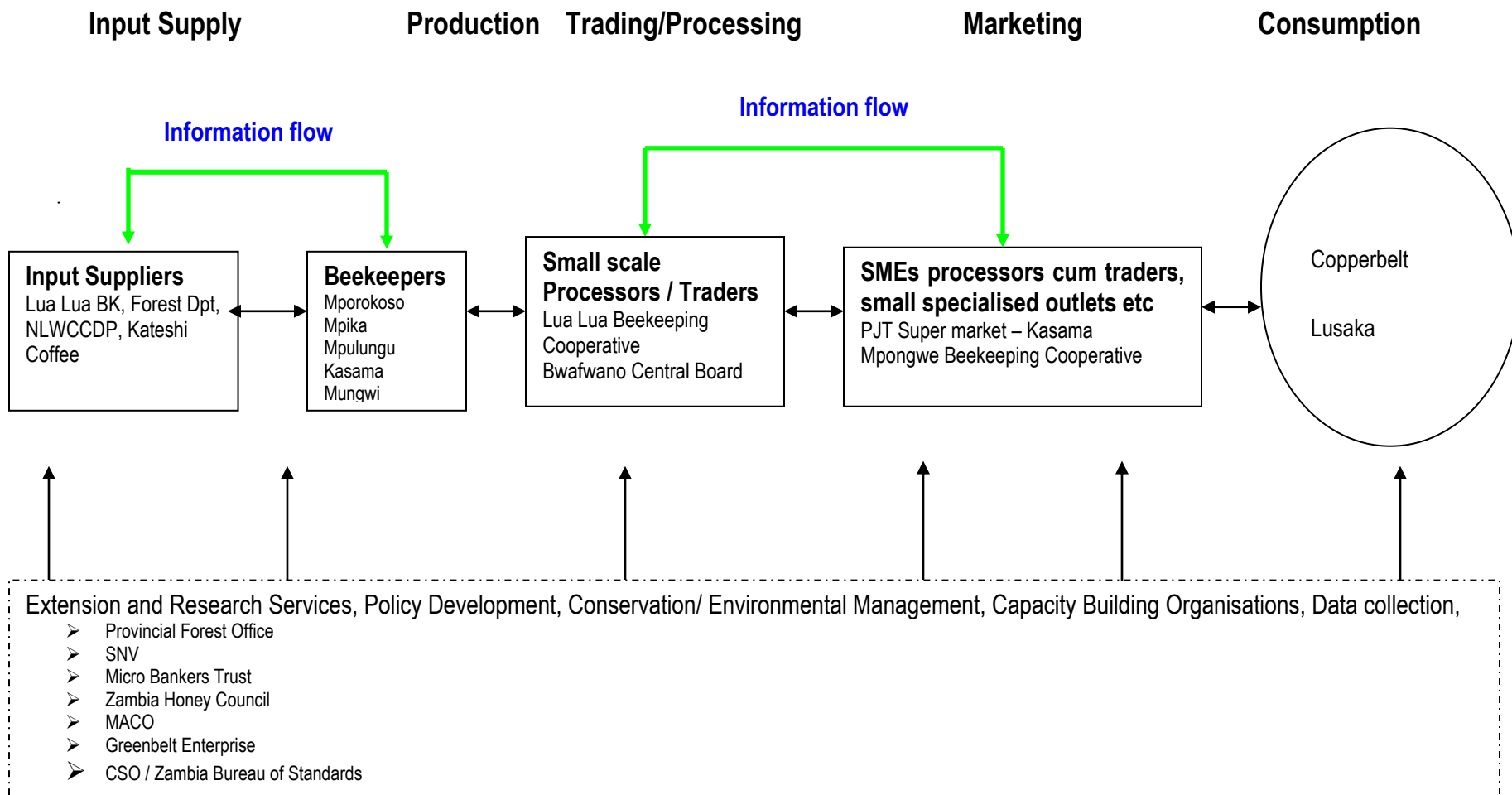
Year	2008				2009			
Quarter	1	2	3	4	1	2	3	4
Objective 4 promoting good governance and responsibility in the honey value.								
<b>Outcome 4.1 Stakeholder forums at Provincial and national level to coordinate and regulate the honey sector</b>								
4.1.1 Facilitate coordination between MTENR, MACO and	X	X						

MCTI, ZDA, ZHC								
4.1.2 Organize stakeholder forums to promote dialogue at Provincial and national level		X	X					
<b>Outcome 4.2. Bee keepers represented and heard at National and provincial levels</b>	x	x	x					
4.2.1 Provide capacity development support to the Zambia Honey Council-Governance		X	X	X				
<b>Outcome 4.3. Bee keeping Cooperative auditing system established</b>								
4.3.1 Engage consultant to carry out a needs assessment to establish gaps in auditing process of co-operatives.		x	x					
<b>Outcome 4.4 HIV/AIDS mainstreamed in bee keeping Cooperatives and processors</b>	X	X						
4.4.1 Assess HIV/Aids transmission and mitigation factors in the sector	X	X						

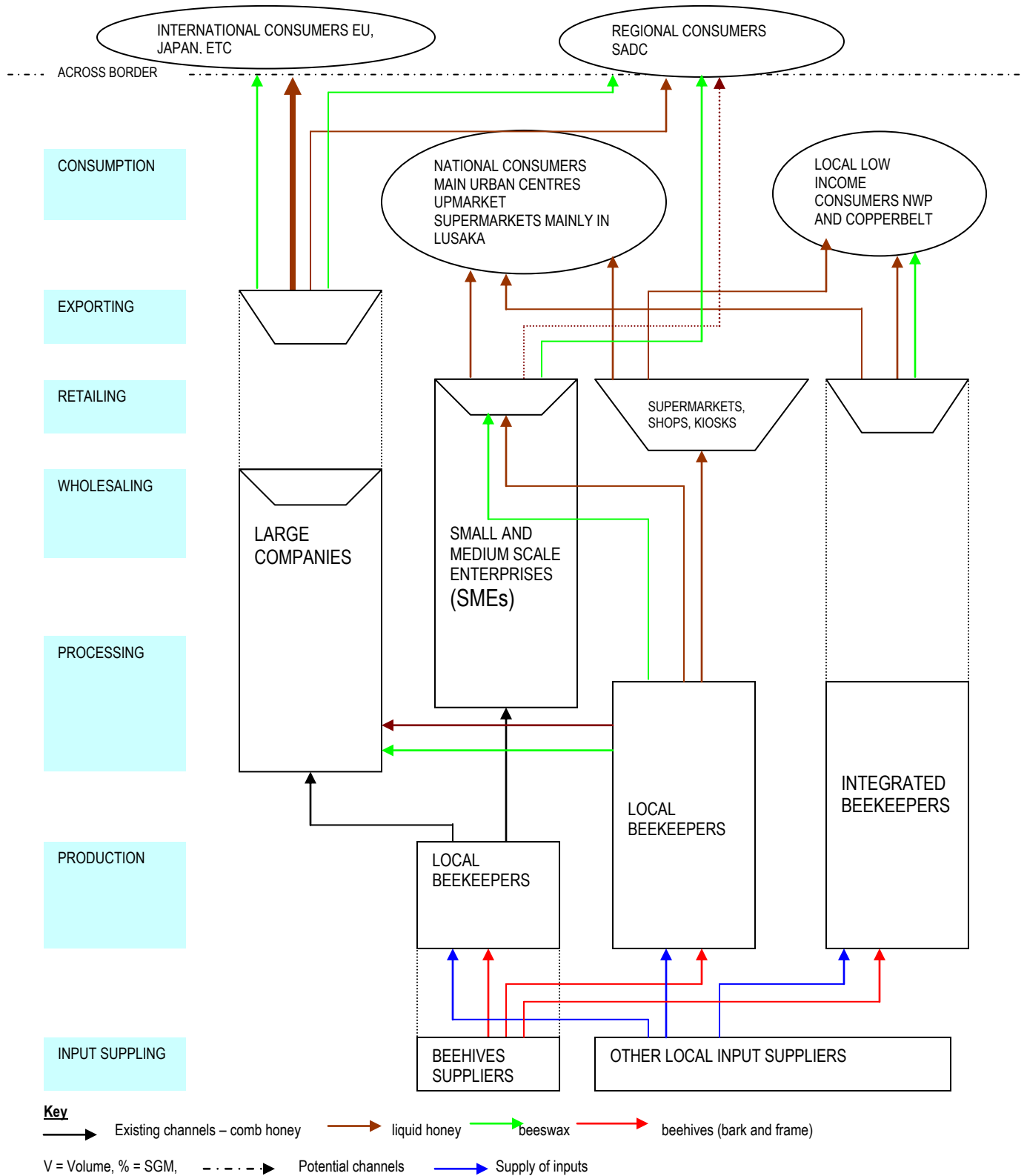
Year	2008				2009			
	1	2	3	4	1	2	3	4
Objective 5 Establish a quality management and certification system for honey								
<b>Outcome 5.1 Dissemination of the honey standards and certification guidelines</b>		X	X					
5.2.1 Facilitate publication of honey standards and certification guidelines	x	x	x					
<b>Outcome 5.2 Build Capacity of bee keepers to comply to established standards and meet certification requirements</b>								
5.3.1 Support and broker training and service provision to improve the harvesting and post-harvest handling and quality awareness of selected producers along the value chain		x	x	x				

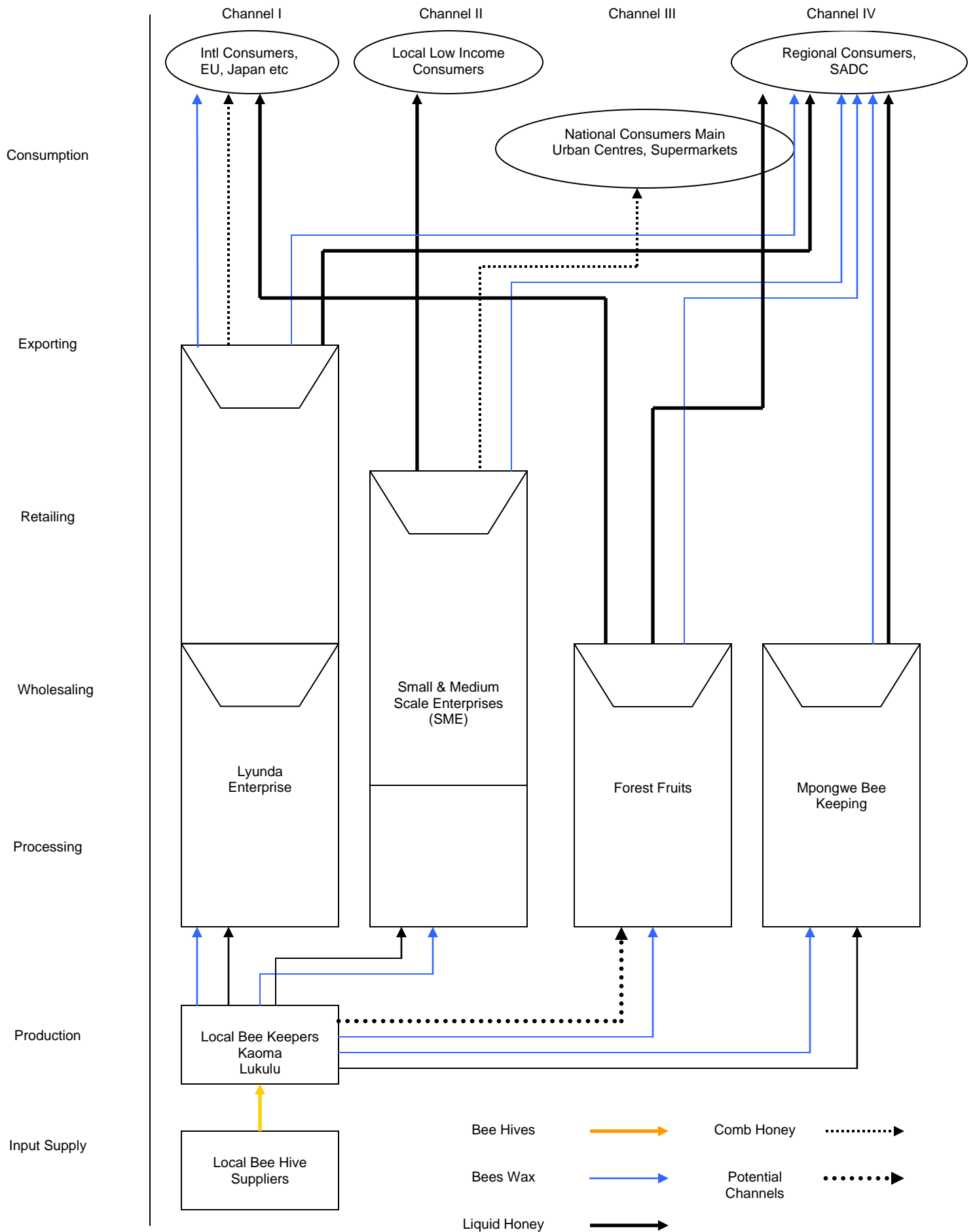
5.3.2 Facilitate fair trade and organic certification		x	x	x				
5.3.3 Facilitate training and producer organization for fair trade, organic or ecocert certification								

**ANNEX 2 Honey Value Chain Map – Honey Sector Northern Province - 2008**



**ANNEX 3 Figure: Honey and beeswax sub-sector map in NWP Zambia**





## Annex 5: Result Chain- BEE Products

