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Business Model

Promoting Bee Keeping

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Promoting Bee Keeping

1. Background

Beekeeping and honey processing is one of the socio-economic activities, which are friendly to forests and the environment in general. In many ecosystems, bees are important pollinators ensuring the maintenance of those ecosystems. For a long time, agriculture has recognised the value of pollination by bees. Even backyard beekeepers witness dramatic improvements in their gardens yield: more and larger fruits, flowers and vegetables.

In India, about sixteen lakh people are directly or indirectly engaged in the bee keeping and allied activities. Major honey producing states in the country include Punjab, Haryana, Himachal Pradesh, Uttar Pradesh, Bihar and West Bengal. Beekeeping has been mainly forest based in the country. Thus, the raw material for the production of honey is being availed from nature.

2. Beekeeping and Honey Processing Business Model for Farmer Producer Organisations (FPOs):

Collectivising farmers into Producer Organisations (POs) have been considered as one of the ways to overcome challenges faced by the small and marginal farmers. Under the 12th Five Year Plan of the Government of India (GoI), promotion and strengthening of FPOs has been one of the key strategies to achieve inclusive agricultural growth.

- Bee keeping/ honey processing is a business opportunity for FPOs as it requires moderate initial investment and depend upon the local crop pattern.
- The business model has the potential to address the fundamental problem of lack of income generating opportunities in growth value chains that can promote integration of poor honey cultivators into the mainstream economy.
- The FPOs can assist the primary producers/cultivators in moving from subsistence to commercial level bee keeping /honey processing in such a way that they will have access to assured markets and are able to successfully compete in those markets.

The key factors to be successful in the area of bee keeping/honey processing must have the following characteristics.

1. Beekeeping is feasible in areas where adequate bee flora is available for a minimum period of 6 months in a year.
2. The selected area should be dry without dampness. High relative humidity will affect bee flight and ripening of the nectar.
3. Presence of natural water bodies around the rearing area.
4. Presence of trees which serve as wind belt in cool areas.
5. Provision of trees or artificial structures to provide shade for the hives.

2.1 Challenges:

Bee keeping and honey processing units in India are facing serious challenges due to various internal and external factors, such as:

1. Lack of crop diversification.
2. Less area under fruits and vegetables, floral scarcity/dearth period.
3. Excessive use of chemicals in agriculture and other crops.
4. Lack of scientific management practices.
5. Climate change.

3. Bee Keeping and Honey Processing- Complementing Doubling of the Farmer's Income

Beehives neither demand additional land space nor do they compete with agriculture or animal husbandry for any input. The beekeeper needs only to spare a few hours in a week to look after his bee colonies. Therefore, bee keeping is ideally suited as a part-time occupation. Beekeeping constitutes a resource of sustainable income generation to the rural and tribal farmers. It provides them valuable nutrition in the form of honey, protein rich pollen and brood. Bee products also constitute important ingredients of folk and traditional medicine.

There are five different types of honey bee keeping practiced in India which includes:

1. **The Rock Bee, *Apis dorsata* (Apidae):** They are giant bees found all over India in sub-mountainous regions up to an altitude of 2700 metre. The Rock Bees construct a 6 feet long and 3 feet deep single comb in open. They shift the place of the colony often. These ferocious and difficult to rear Rock Bees produce about 36 kg honey per comb per year. Among the described bees here, these are the largest.

2. **The Indian Hive Bee, *Apis cerana indica* (Apidae):** They are the domesticated species, which construct multiple parallel combs with an average honey yield of 6-8 kg per colony per year. The Indian Hive Bees are larger than Apis florea but smaller than Apis mellifera. They are a native of India/Asia, and are more prone to swarming and absconding.

3. **The Little Bee, *Apis florea* (Apidae):** They build single vertical combs. Like the Rock Bees, the Little Bees too construct comb of the size of palm in open i.e. in branches of bushes, hedges, buildings, caves, empty cases, etc (Fig 2) in branches of bushes, hedges, buildings, caves, empty cases etc (Fig. 2). They produce about half a kilo of honey per year per hive. As the little bees frequently change their place, they are not rearable. The size of the bees is smallest among the four described Apis species and smaller than the Indian bee. They distribute only in plains and not in hills above 450 MSL.

4. **The European Bee or Italian Bee, *Apis mellifera* (Apidae):** Just like the Indian Bees, the European Bees or Italian Bees too build parallel combs. Except Apis dorsata, the European Bees or Italian Bees are bigger than all other honey bees. Their average production per colony is 25-40 kg. They have been imported from European countries (Italy). They are less prone to swarming and absconding.

5. **Dammer Bee or Stingless Bee, *Melipona iridipennis* (Meliporidae):** Besides true honey bees, two species of stingless or dammer bees, viz. Melipona and Trigona occur in our country in abundance. These bees are much smaller than the true honey bees and build irregular combs of wax and resinous substances in crevices and hollow tree trunks. The stingless bees have the importance in the pollination of various food crops. They bite their enemies or intruders. It can be domesticated. But the honey yield per hive per year is only 100 gms.

Out of the above-mentioned five types of bees, *Apis mellifera* and *Apis cerana indica* are the two most widely reared in beekeeping for honey.

Zone/State wise details of bee species in use:

	North	East	West	South
A. mellifera	Delhi, Uttar Pradesh, Haryana, Punjab, Himachal Pradesh	Bihar and West Bengal	Rajasthan	
A. cerana indica	Uttarakhand, Jammu & Kashmir	Odisha, All North Eastern States (8), Chhattishgarh and Jharkhand	Gujarat, Madhya Pradesh, Maharashtra, Goa	Andhra Pradesh, Kerala, Karnataka, Tamil Nadu, Puducherry, Andaman & Nicobar

Table 1: Source: National Bee Board

4. Cost - Benefit Analysis

4.1 Apis mellifera Bee Species (Assumed Units: 50 nos. of Bee Colonies for Commercial Production)

A	Non- Recurring Costs	Unit Cost in INR	Amount in INR
1	50 Beehives with supers	1,200/- per set	60,000
2	50 bee colonies each of 8 frames @ INR. 300/- per frame	2,400/- per colony	1,20,000
3	50 iron stands	100/- each	5,000
4	Honey extractor (SS) and other equipments, including food grade plastic containers, honey extraction net, tent, bee veil, etc.		25,000
	Sub total A		**2,10,000**
1	Comb foundation sheets (Wax Sheets) 100 kg for one unit	300/- per kg	30,000
2	2 50 Kg Sugar for feeding in dearth period	40/- per kg	10,000
3	Depreciation on fixed capital	10% per annum	21,000
4	Miscellaneous expenses including labour charges, migration cost, etc. per annum (man power required: atleast one regular basis-plus two casual labour)		1,00,000
	Sub total B		**1,61,000**
1	Honey production @25 kg per colony, total production (25*50=1250) kg.	200/- per kg	2,50,000
2	Cost/ sale price of bee colonies of 8 frame each multiplied during the year i.e. atleast 50 colonies (50x300x8) – (15000x8) 2400/- per colony of 8frames	2400/- per colony	1,20,000

3	Production of bee pollen (250 kg) @ 5 kg/ colony	360/- per kg	90,000
	Sub total C		**4,60,000**
	Net Income (B-C-A)		**89,000**

Table 2: Source: http://midh.gov.in/Archive/AAP/NBB.pdf

4.2 Cost- Benefit Analysis for Apis cerana indica Bee Species (Assumed Units: 50 nos.of Bee Colonies for Commercial Production)

A	Non- Recurring Costs	Unit Cost in INR	Amount in INR
1	50 beehives with supers	1,200/- per set	60,000
2	50 bee colonies each of 8 frames @ Rs. 300/- per frame	2,400/- per colony	1,20,000
3	50 iron stands	100/- each	5,000
4	Honey extractor (SS) and other equipments, including food grade plastic containers, honey extraction net, tent, bee veil, etc.		25,000
	Sub Total A		**2,10,000**
B	**Recurring Cost**		
1	Comb foundation sheets (Wax Sheets) 100 Kg for one unit	300/- per kg	30,000
2	250 Kg Sugar for feeding in dearth period	40/- per kg	10,000
3	Depreciation on fixed capital	10% per annum	21,000
4	Miscellaneous expenses including labour charges, migration cost, etc. per annum (man power required: atleast one regular basis-plus two casual labour)		1,00,000
	Sub Total B		**1,61,000**
C	**Income**		
1	Honey production @10 kg per colony Total production 500 kg.	200/- per kg	1,00,000
2	Cost/sale price of bee colonies of 8 frame each multiplied during the year i.e. atleast 50 colonies (50x300x8) – (15000x8) 2400/- per colony of 8 frames	2400/- per colony	1,20,000
3	Production of bee pollen (250 kg) @ 5 kg/ colony	400/- per kg	1,00,000
	Sub Total C		**3,20,000**
	Net Income (B-C-A)		**-51,000**

Table 3: Source: http://midh.gov.in/Archive/AAP/NBB.pdf

As the subsequent years do not require any non-recurring materials, the income would be more from the second year. Besides the cash benefit through honey and bees wax, bees also render pollination service to the crop plants and help in getting increased fruit setting and yield. It is generally referred that the value of pollination service by the bees is 10 times more money value that contributed from the honey and bees wax.

Financial Analysis- Bee Keeping, Honey Processing and Marketing

For *Apis. melifera* (Assumption: loan amount of INR 3,00,000/- own contributuion of INR 71,000/- loan tenure of 5 years, rate of interest as 12% p.a. with half yearly repayments with 1st year only interest payment.)

Table 4: Financial analysis of A. mellifera bee keeping

S.No.	Financial Analysis	Year 1 (INR)	Year 2 (INR)	Year 3 (INR)	Year 4 (INR)	Year 5 (INR)
i	Capital Costs	2,10,000				
ii	Recurring costs	1,61,000	1,77,100	1,94,810	2,14,291	2,35,720
	Total Costs	3,71,000	1,77,100	1,94,810	2,14,291	2,35,720
iii	Income	4,60,000	5,06,000	5,56,600	6,12,260	6,73,486
	Total	**4,60,000**	**5,06,000**	**5,56,600**	**6,12,260**	**6,73,486**
iv	Net income	89,000	3,28,900	3,61,790	3,97,969	4,37,766
	DF @15%					
	NPV of Costs	8,24,329				
	NPV at Income	18,33,485				
	NPW	10,09,157				
	BCR	2.22				
v	Total Financial Outlay	9,57,201				
	Loan	3,00,000				
	Repayment Period (in years)	5				
	No. of installments (half yearly)	10				
vi	Repayment Schedule					
	Total Loan o/s	3,00,000	3,00,000	2,25,000	1,50,000	75,000
	Interest Repayment (@ 12%)	36,000	36,000	27,000	18,000	9,000
	Principal Repayment		75,000	75,000.00	75,000	75,000
	Income	4,60,000	5,06,000	5,56,600	6,12,260	6,73,486
	Capital+Recurring	3,71,000	1,77,100	1,94,810	2,14,291	2,35,720
	Net Surplus	89,000	3,28,900	3,61,790	3,97,969	4,37,766
	Total Repayment	36,000	1,11,000	1,02,000	93,000	84,000
	Net Profit	53,000	2,17,900	2,59,790	3,04,969	3,53,766
	DSCR	3.5	3.3	3.8	4.5	5.3
	Avg DSCR	4.1				

For *Apis. cerana indica* (Assumption: Loan amount of INR 3,00,000/- Own contributuion of INR 71,000/- Loan tenure of 5 years, rate of interest as 12% p.a. with half yearly repayments with 1st year only interest payment.)

S.No.	Financial analysis	Year 1 (INR)	Year 2 (INR)	Year 3 (INR)	Year 4 (INR)	Year 5 (INR)
i	Capital Costs	2,10,000				
ii	Recurring costs	1,61,000	1,77,100	1,94,810	2,14,291	2,35,720
	Total Costs	3,71,000	1,77,100	1,94,810	2,14,291	2,35,720
iii	Income					
	Total income	3,20,000	3,52,000	3,87,200	4,25,920	4,68,512
	Total	**3,20,000**	**3,52,000**	**3,87,200**	**4,25,920**	**4,68,512**
iv	Net Income	-51,000	1,74,900	1,92,390	2,11,629	2,32,792
	DF @15%					
	NPV of Costs	8,24,329				
	NPV at Income	12,75,468				
	NPW	4,51,140				
	BCR	1.55				
v	Total Financial Outlay	9,57,201				
	Loan	3,00,000				
	Repayment Period (in years)	5				
	No. of installments (half yearly)	10				
vi	Repayment Schedule					
	Total Loan o/s	3,00,000	3,00,000	2,25,000	1,50,000	75,000
	Interest Repayment (@ 12%)	36,000	36,000	27,000	18,000	9,000
	Principal Repayment		75,000	75,000	75,000	75,000
	Income	3,20,000	3,52,000	3,87,200	4,25,920	4,68,512
	Capital+Recurring	3,71,000	1,77,100	1,94,810	2,14,291	2,35,720
	Net Surplus	-51,000	1,74,900	1,92,390	2,11,629	2,32,792
	Total Repayment	36,000	1,11,000	1,02,000	93,000	84,000
	Net Profit	-87,000	63,900	90,390	1,18,629	1,48,792
	DSCR	-0.4	1.9	2.2	2.5	2.9
	Avg DSCR	1.8				

Table 5: Financial analysis of A.cerana indica bee keeping

5. Case Example- Umbrella Programme for Natural Resource Management (UPNRM)

Project Overview	
Project location	Chamoli, Rudra Prayag, Tehri Garhwal and Uttarkashi district in Uttarakhand.
UPNRM support	Loan: INR 87.50 lakhs Grant: INR 15.68 lakhs
Duration	7 years
Number of participants	334

Table 6: DNPPCL UPNRM project overview

UPNRM is a joint venture of National Bank for Agriculture and Rural Development ([1]NABARD), Deutsche Gesellschaft für Internationale Zusammenarbeit ([2]GIZ) GmbH and Kreditanstalt für Wiederaufbau ([3]KfW) which extends loan with need based grant to NGOs, Community Based Organisations (CBOs), Producer Organisations (POs), Banks, Private Companies etc for promoting natural resource based livelihoods and enterprises across India. GIZ being a technical agency provide technical support to NABARD and implementing agencies/channel partners. KfW provides soft loan and grant as accompanying measure to NABARD. NABARD extend finance to channel partners and oversees the entire programme through its regional offices and regional coordination units. So far, 334 projects have been sanctioned across 22 states and one Union Territory with investment of over INR 600 crores.

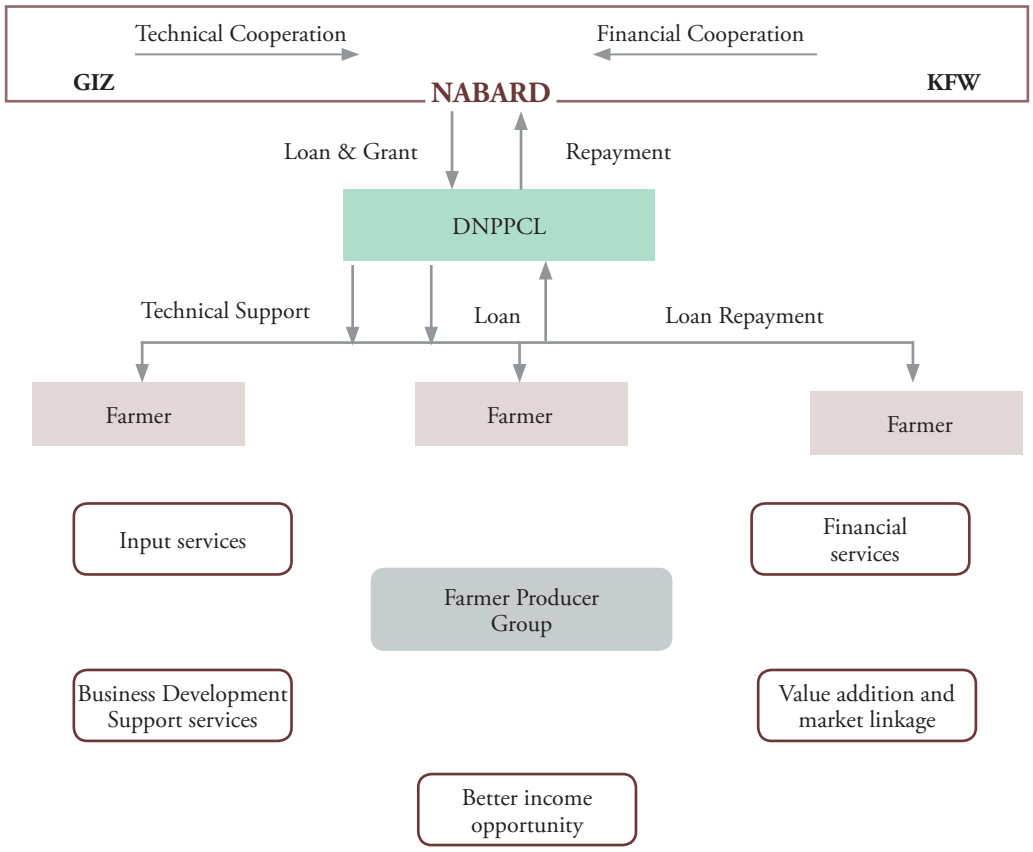
Promoting bee keeping/honey processing value chain is the one of the successful business models for FPOs under UPNRM. Devbhumi Natural Products Producer Company Limited (DNPPCL) – a Farmer Producer Company (FPC) operating in Chamoli, Rudraprayag, Tehri Garhwal and

Uttarkashi districts of Uttarakhand received fund from NABARD under UPNRM. DNPPCL further on-lended the loan to its member farmers for taking up bee keeping and honey production as a source of livelihood in the Himalayan hilly area. The bee species used by the primary producers for bee keeping and honey production is *Apis. Cerana indica.*

DNPPCL used the grant assistance for training and capacity building of the member farmers and market promotion of the locally processed honey. It repays the loan to NABARD from the revenue earned through the sale of honey which was primarily sold to the company by the member farmers.

1 National Bank for Agriculture and Rural Development
2 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
3 Kreditanstalt für Wiederaufbau (Reconstruction Credit Institute)- German government-owned development bank

Figure 1: UPNRM Project Model for DNPPCL



6. Impact

Around 4,101 low income rural households from 400 mountain villages in the Garhwal region of Uttarakhand has taken up bee keeping on a commercial scale through FPO. The impacts observed by the FPO members are described below.

6.1 FPOs with a profitable business model

Interaction with the farmers of UPNRM project shows that bee keeping and honey processing activities have led to the creation of strong and vibrant producer groups at the village level, producer associations at the middle level and also a strong and democratic producer organisation at the state level. For the FPOs operating in the remote areas and mountains, beekeeping proved to be a viable business model. FPOs can take up this activity through exploring local crop and flora patterns with low investment.

Table 7: Sales of Honey by DNPPCL (in tonnes)

	Year			
	2012-13	2013-14	2014-15	2015-16
Annual Sales	12.50	12.80	18.00	18.50

Source DNPPCL

6.2 Capacity Building of Producers

- Capacities of more than 4,000 beekeepers have been built in advanced techniques of beekeeping which have enabled the producers to independently engage in beekeeping activities.
- **Adoption of composting technology and currently nearly 3,500 producers have started using composting technology.**

6.3 Encouraging Private Entrepreneurship

Through the involvement of private entrepreneurs as business development support providers like breeding centres, carpenters for bee box manufacturing and vermicompost unit owners; the business model has encouraged private entrepreneurship in the rural villages – especially amongst the youth who are generally inclined to migrate to the plains in search of livelihood opportunities.

6.4 Increase in Incomes

It was observed that in UPNRM, beekeeping has led to supplementing the incomes of the producers. Based on DNPPCL estimates, on an average, a beekeeper is earning around INR 5,000 per annum from beekeeping activities. Although in many cases the income levels are higher than the average.

Table 8: Estimated Income of Producers for the Year 2016

Categories	No. of Producers	Income (Rs.)	Average Annual Income Per Producer (INR)
Commercial Level Producers (more than 10 bee colonies)	288	34,56,000	12,000
Middle Level Commercial Producers (Between 5 to 10 bee colonies)	1,951	1,17,06,000	6,000
Under commercial production (Less than 5 bee colonies)	1,862	55,86,000	3,000
Total	4,101	2,07,48,000	5,059

Source: DNPPCL, 2016

6.5 Gender Inclusion

- Around 20% of the women members from the farmer households have become beekeepers which was considered a task of men earlier.
- With the capacity building support under UPNRM, a majority of the women producers were now not only doing all beekeeping operations independently (from bee rearing to harvest) but were also selling their produce independently – without the involvement of men.

6.6 Biodiversity Conservation

It has been found that beekeeping enterprise promotion has directly or indirectly led to biodiversity conservation.

Table 9: Yield increase due to bee pollination

Crop	% Yield increase due to bee pollination
Mustard	44
Sunflower	32-45
Cotton	17-20

Crop	% Yield increase due to bee pollination
Lucerne	110
Onion	90
Apple	45

Source: http://www.agrifarming.in/honey-bee-farming-information-guide/

Improved pollination: The farmers reported on the improvement of the productivity of their crops. The farmers said that in several crops, particularly mustard, they felt that the productivity had increased slightly. Farmers attributed this to improved pollination due to beekeeping. Similarly, some farmers cultivating fruit trees such as citrus and peach felt that the yields had marginally improved in the past 2-3 years owing to pollination.

Conservation of trees: It was reported that beekeeping was resulting in promoting conservation of certain tree species by the beekeeping farmers. People had become careful about protecting the flora for the bees and consequently they were themselves regulating activities such as lopping and felling of certain trees.

Some tree species in the mountain villages that provide important flora for the bees include Pangar (*Aesculus indica*), Kafal (*Myrica esculenta*), Kingod ((Berberis aristata), Burans (*Rhododendron spp.*), Timru (*Zanthoxylum armatum*), Baanj (*Quercus incana*), Tejpat (*Cinnamomum timala*), Utis (*Alnus nepalensis*), Bhimal (*Grevia optiva*) Panja and Pahiya. The farmers ensured on taking care of such trees and protecting them from falling. said that they were taking care that such trees were protected from felling and also if lopping was done then it was regulated so that the growth of the tree was not impaired.

"If there is no flora for the trees then our bees will not survive. We have become careful about protecting key tree species," said Uttam Singh, a beekeeper from Chamoli district.

7. Proposed Institutional Model for Mainstreaming Bee Keeping/ Honey Processing Value Chain for FPOs:

Increased economic returns, as described in table 1, of bee keeping and honey processing by FPOs/ FPCs, makes it financially viable for institutional funding, especially from banks.

As per Khadi and Village Industries Commission (KVIC) classification based on the number of beekeepers and honey production, country has been divided into three segments for establishment of State Beekeeping Extension Centers.

Table 10: Potential states for bee keeping

MOST POTENTIAL STATES	MEDIUM POTENTIAL STATES	LOW POTENTIAL STATES
Punjab, West Bengal, Bihar, Kerala, Karnataka, Uttar Pradesh, Tamil Nadu, and Uttaranchal	Andhra Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Gujarat, Jharkhand, Madhya Pradesh, Meghalaya / Shillong and Odisha	Manipur, Mizoram, Tripura, Rajasthan, Sikkim, Goa, Arunachal Pradesh and Andaman Nicobar.

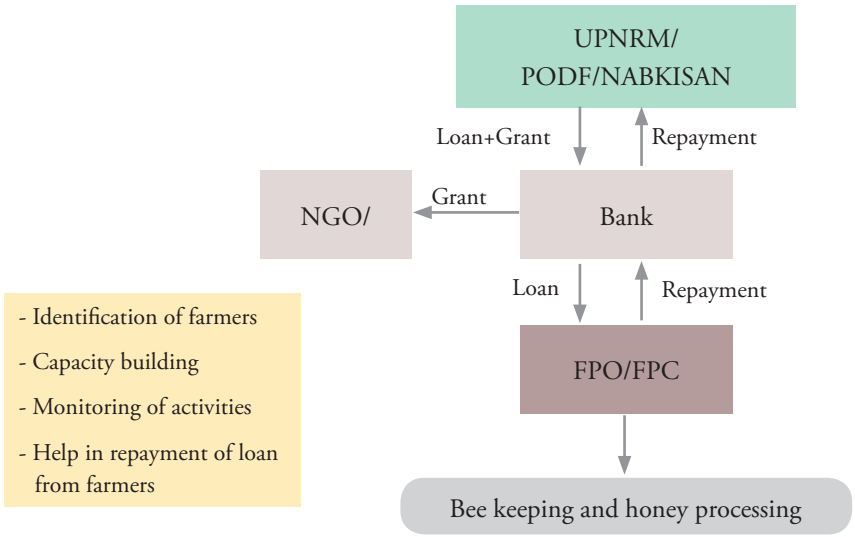
Source: http://www.kvic.org.in/kvicres/beekeeping.html

It is therefore recommended to replicate and upscale the activity in FPO model I the higher and medium potential states for better income opportunity for the farmers.

7.1 Bank-NGO/Cooperative Model under NABARD's Financing

Bank-NGO model can be financed directly by NABARD under UPNRM, Producer Organisation Development Fund (PODF) or Nabkisan Finance Limited (NABKISAN) funding lines. In this model, bank (DCCB, commercial banks) can lend to FPOs/FPCs. The farmers could be identified by the FPOs in their honey production area. The NGO/ Producer Organisation Promoting Instituion (POPI) would play the role of technical implementing agency providing implementation, technical and monitoring support for the intervention.

Figure 2: Bank- NGO/Cooperative Model of FPO Financing



Grant support for awareness generation and capacity building may be availed from following options:

NABARD's Schemes:

NABARD's various schemes can be explored for accessing grant support for trainings and capacity building of farmers and the implementing agency/channel partner.

i. Farm Sector Promotion Fund (FSPF)[4]

FSPF has been created for supporting innovations in agriculture and allied sector leading to enhancement of farm income and farm productivity. The schemes supports:

- Promotion of Farmers Clubs for Technology Transfer.
- Capacity Building/ exposure visit for adoption of modern technologies/best practices.
- Productivity improvement, aggregation, innovations and market connectivity, etc.
- Awareness building on improving water use efficiency.

ii. Capacity Building for Adoption of Technology (CAT)[5]

NABARD's CAT scheme facilitates adoption of technology by farmers/ entrepreneurs through promoting institutions/ agencies like banks, corporates, NGOs, Self Help Group (SHG) and Farmers' Clubs.

4 https://www.nabard.org/demo/auth/writereaddata/File/Farm%20Sector%20Promotion%20Fund%20Objectives.pdf
5 http://www.nabard.org/auth/writereaddata/File/Support%20for%20Capacity%20Building%20for%20Adoption%20of%20Technology%20(CAT).pdf

iii. Rural Innovation Fund (RIF)[6]

RIF is a fund designed to support innovative, risk friendly, unconventional experiments in Farm, Non-Farm and Micro-Finance sectors that would have the potential to promote livelihood opportunities and employment in rural areas. The guiding principle for operating this fund are:

- The activities must have the rural poor in their focus and must be innovative, experimental and demonstrative in nature leading to replicability and commercial viability.
- The activities funded may involve development of new products, processes, prototypes, technology, patenting and extension support.
- Appropriate action research and studies contributing to better understanding of rural development issues, policy and process implementation may be undertaken.

iv Livelihood Enterprise Development Programme (LEDP)[7]

LEDP is a project based approach encompassing the complete value chain for offering end to end solutions to the SHG members in a cluster of villages. Skill development and capacity building are the main part of this programme.

National Bee Board (NBB) provides necessary training and capacity building support for the bee keepers. The supports include:

1. Registration of beekeepers and farmers for traceability purpose.
2. Integrating tribal and fringe communities of forest dwellers into beekeeping.
3. Coordination for formulating standards for honey and other bee hive products for domestic and international markets.
4. Ensuring hassle free transportation of bee colonies during migration.
5. Advisories on good beekeeping practices.
6. HRD: training, seminar, exposure visits, etc.
7. Providing bee boxes, bee colonies, etc. to beekeepers.
8. Publication of Magazine "Bee World".

In addition, NBB also provides financial support for improving pollination in the area.

Table 11: Financial support for improving pollination in the area

Component	Cost Norm (INR)	Assistance Pattern
i) Production of nucleus stock (Public sector)	20 lakh	100% of the cost
ii) Production of bee colonies by bee breeder	10 lakh	40% of cost for producing min. of 2000 colonies / year
iii) Honey bee colony	2,000/colony of 8 frames	40% of cost limited to 50 colonies / beneficiary
iv) Bee Hives	2,000/ per hive	40% of cost limited to 50 colonies / beneficiary
v) Equipment including honey extractor (4 frame), food grade container (30 kg), net, including complete set of Bee keeping equipment	20,000/set	40% of the cost limited to one set per beneficiary

Source: http://nhm.nic.in/Archive/midhPPT8.pdf

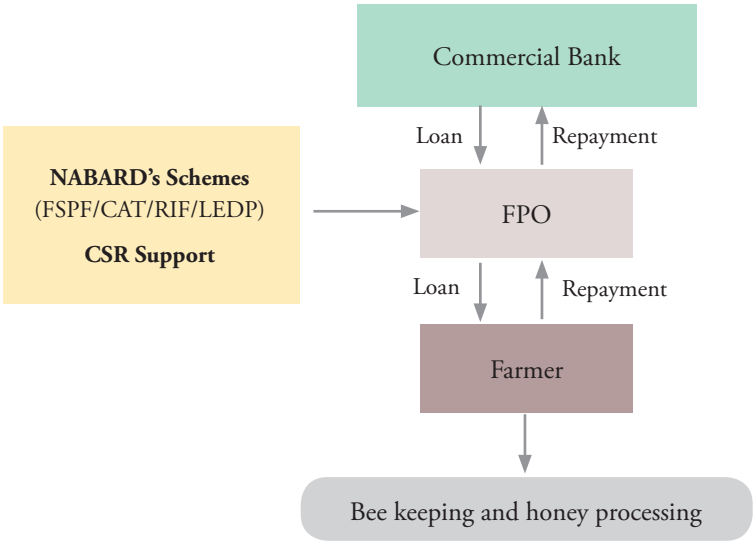
6 https://www.nabard.org/demo/auth/writereaddata/File/Rural%20Innovation%20Fund%20FAQS.pdf
7 http://subhutitech.in/wp-content/uploads/2016/10/NABARD_Status_of_Microfinance_in_India_-_2015-16.pdf

7.2 FPO Financing by Commercial Banks

In this model, FPO can take a loan from a commercial bank of their region. These FPO will further give loan to farmers after keeping a fixed margin on interest rates to meet its administrative cost. The capacity building support fund that is currently an integral part UPNRM financing, can be obtained from NABARD's scheme (details of the schemes are mentioned as mentioned in earlier section), state government scheme, Corporate Social Responsibility (CSR) programme for primary bee keepers. The capacity building fund may be used in trainings, exposure visit for farmers and/or FPO board members, demonstration infrastructure etc. This can also be used for meeting administrative expenses where interest margins for FPO are low. Additionally, a bank's demand for collateral securities can also be fulfilled with this fund. All these conditions should be mentioned in the project design itself to ensure smooth flow of fund during the project implementation phase. Some commercial banks who offer similar financial assistance to FPOs are ICICI Bank, Union Bank of India, Canara Bank, Vijaya Bank, Ratnakar Bank etc.

NGOs, Resource Institutions (RIs), donor agencies, other support institutions should facilitate mobilisation of farmers to form FPOs and help them to connect with banks for availing credit for honey production and processing.

Figure 3: Bank- NGO/Cooperative Model of FPO Financing



7.3 Term Loan and Working Capital Support for FPOs from other Financial Institutions:

As the FPO progresses from being a start-up entity to a more mature organisation, they build themselves trade-ready and have a track record to attract finance from formal financial institutions and commercial banks. The financial instituions provide working capital are Friends of Women's World Banking (FWWB), Maanviya Holding (Oikocredit), NABFINS and Ananya Finance etc.

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