JKTPO
JAMMU & KASHMIR TRADE PROMOTION ORGANIZATION
(A Government of J&K Undertaking)

Department of
Industries & Commerce

DISTRICT SHOPIAN

District Export Action Plan

Shopian District

"Each district of our country has a potential equal to that of one country; each of our districts has the capacity equal to a small country in the world. We need to understand this power and channelize this potential. And why should each district not think of becoming an export hub? Each district has its own handicraft and each district has its unique specialities. If some district is known for its perfumes then some other district may have saris as its distinct identity whereas some other district is known for utensils and the other district is famous for its sweets. Each of our districts has a diverse identity and potential for global market."

Hon'ble Prime Minister addressing the Nation on Independence day (15TH August, 2019)

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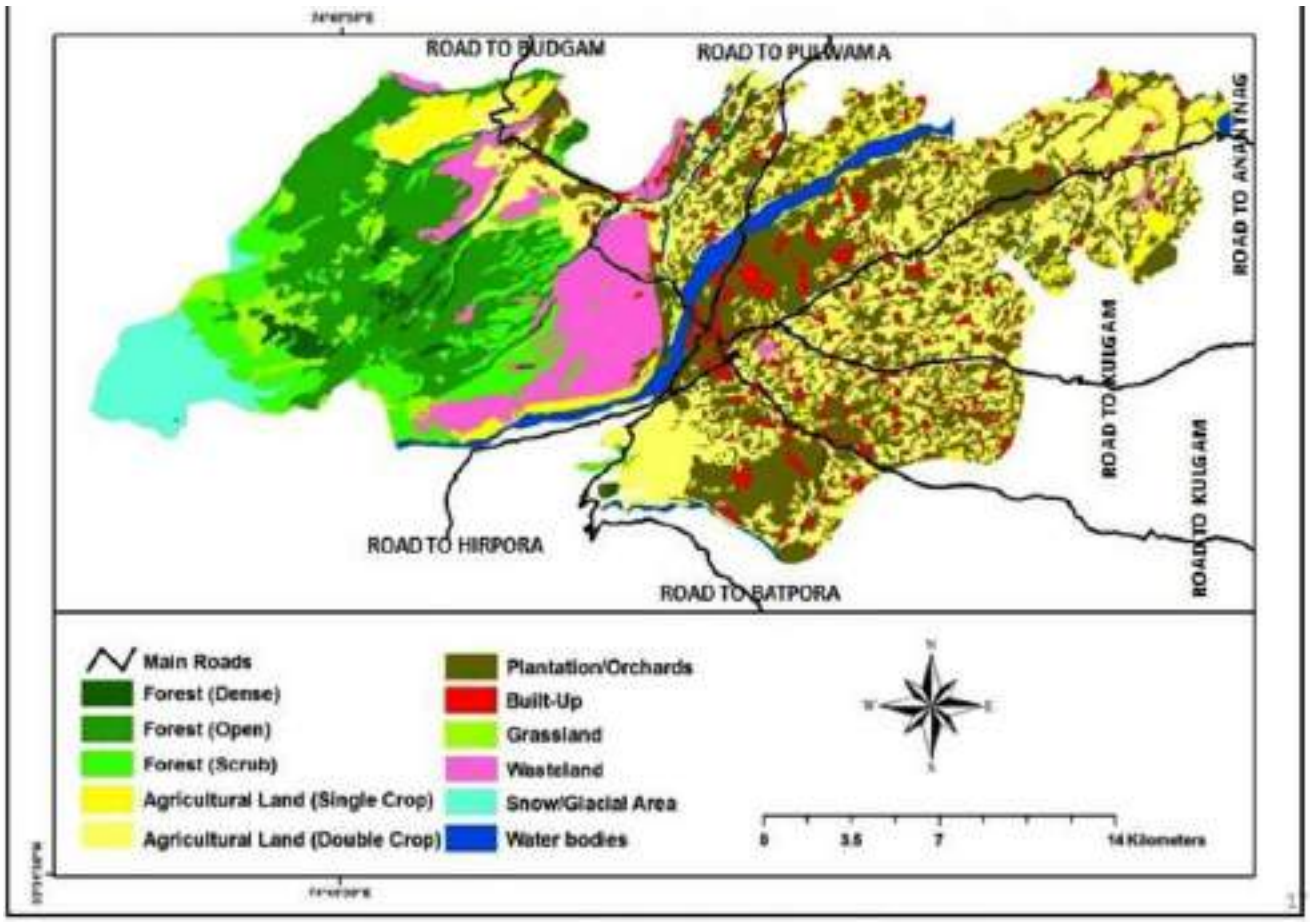
❖ District Overview

Location & Geographical Area.

Shopian is positioned 51 kilometres away from Srinagar and 20 kilometres from Pulwama, with well-established road connections to Anantnag and Kulgam. In the past, Shopian held significance as a key point on the historic Mughal road linking Lahore and Srinagar. Unfortunately, over the last few centuries, this ancient route has been neglected, except for occasional use by Bakherwals and Gujjars during their seasonal migrations.
Situated in the southern and southwestern reaches of the Kashmir valley, the Shopian Sub-Division is closely situated near the Pir Panjal mountain range. It shares its boundaries with District Kulgam to the east, District Budgam to the northwest, and is bordered by District Pulwama to the north. To the south and southwest, it is flanked by the districts of Rajouri and Poonch. Due to its strategic location and involvement in trade and transit activities, Shopian served as one of the Wazarat Headquarters among the six Wazarats in Kashmir from 1872 to 1892 A.D. However, following a reduction in the administrative divisions of Kashmir, including Shopian, three Wazarats were discontinued.



Topography

Due to its hilly terrain and favourable agro-climatic conditions, Shopian boasts extensive orchards, particularly apple and walnut, which significantly contribute to the socio-economic landscape of its rural community. The presence of nearby hilly tracts and pastures offers substantial potential for the development of its livestock population. The total area of the sub-division encompasses 30,742 hectares, with 19,692.5 hectares designated as cultivable land. Grazing lands cover approximately 2,948 hectares, while 260.5 hectares are classified as forest land. The remaining 7,841 hectares consist of lands of various other natures. The district is situated between 33.43' N latitude and 74.49' E longitude.

Administrative Setup:

S.No	Name of Organization unit	Details of organizational unit
1	Sub Divisions	1-Zainapora
2	Tehsils	7-Shopian, keller, Keegam, Hermain, Chitragam, Barbugh, ImamSahib, Zainapora
3	Development Blocks	9-Shopian, Kanijullar, Kaprin, Chitragam, Ramnagri, Zainapora, Hermain, Keeler, Brabugh, Imam Sahib
4	Gram Panchayat	98
5	Assembly Constituencies	2-Shopian, wachi
6	Zila Parishad	1-Shopian
7	Nagar Panchayat (Notified area Committee)	1-Shopian

Demography

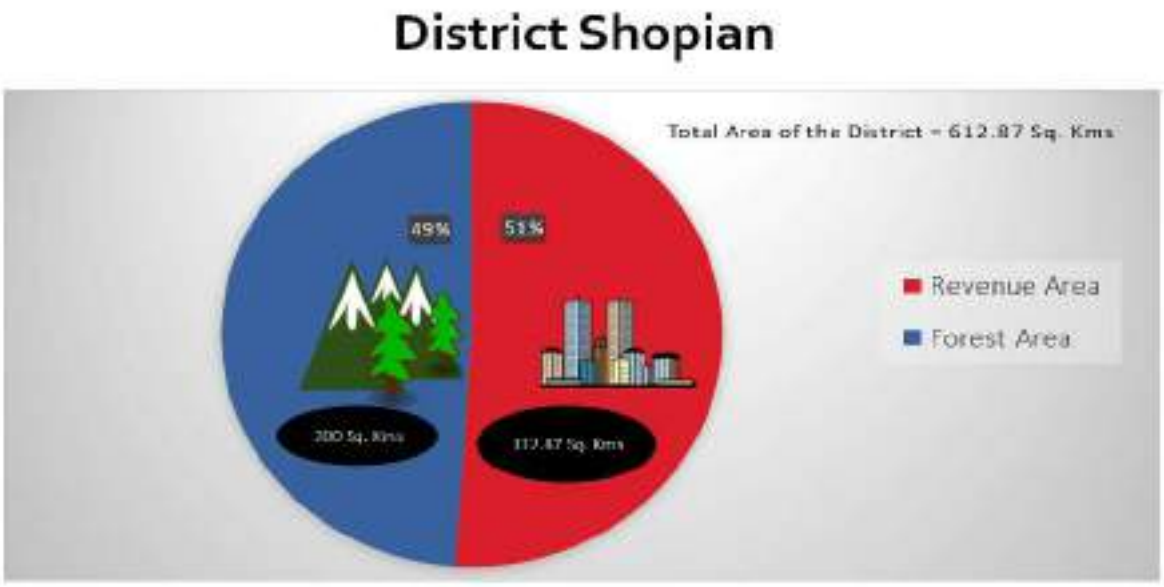
Altitude	**2146 mts above sea level**	**Area under fresh**	**22902 Hectares**
Geographical Area	612.87 sq.km	Rural population	2.50 lacs
Forest area	300 sq.km	Urban population	0.16 lacs
Cultivated Land (Hectts)	33797	No. of ST population	0.15 lacs
Irrigated Land (Hectts)	12501	No. of BPL population	54800

Total land of the District	76854 Acres	No. of Tehsils	07
Total population	2.68 lacs	No of Villages	232
Sex Ratio	950	No. of Nayabats	13
Literacy Rate	62.49%	No. of Girdawar Circles	13
Area under fruit	26258 Hectares	No. of Halqas	43
Area under Dry	3356 Hectares	Municipal Committees	01

(Source:Deptt of Planning)

The local economy depends on agriculture. Apple growing "provides employment to about 60% of the population and is the main source of livelihood of many households. Apple-growing is more profitable than other crops, partly because the hilly nature of the land makes it harder to cultivate other crops than apples.

District at a Glance	
Total Population	2.66 lacs (census 2011)
ST Population	0.22 lacs
Cultivable Land (Hectts.)	33797
Irrigated Land (Hectts.)	12501
No of Sub-Divisions	01
No of Tehsils	07
No of Niabats	13
No of CD Blocks	09
No of Assembly Segments	02
No. of Panchayat Halqas	98
No. of villages	232 (census 2011)
Municipal Council	01 (17 Wards)
Fruit Production during 2022-23	3.377 lac MT



Industrial Scenario of Shopian District

Existing Status of Industrial Areas in the District Shopian

Industrial Estates of the District			
	Developed/ Established Industrial Estates	Newly acquired Industrial Estates	Total Number of Industrial Estates
Number of Estates	02 Gagren Aglar	08	10
Land in Kanals	387.45	957.775	1345.225

Source= DIC Shopian

Upcoming Industrial Estates: Progress under New Land Allotment Policy

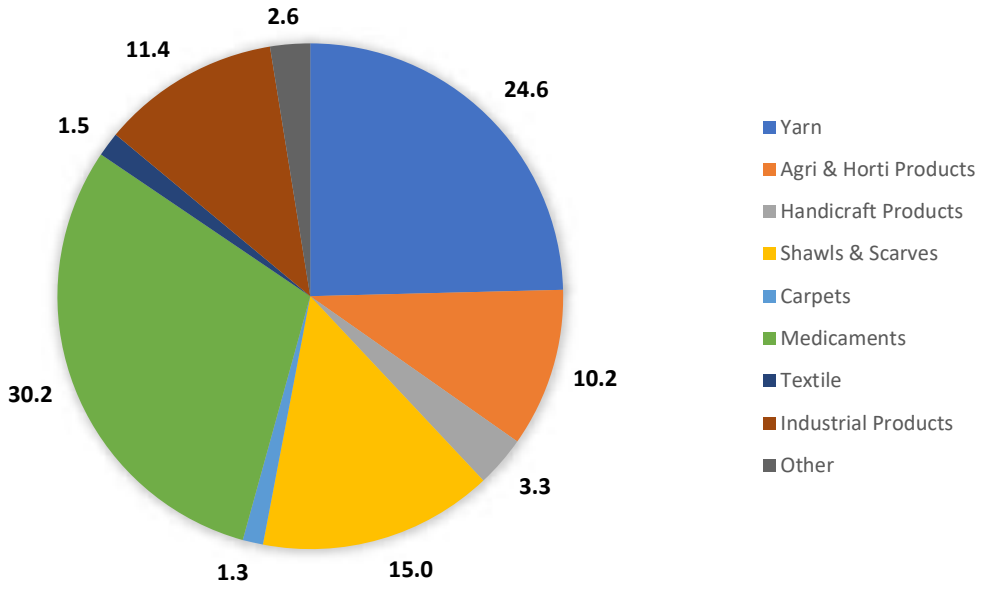
Upcoming Industrial Estates	Area (Kanals)	Status	Remarks
I/E Trenz	500 Kanals	Handed over to SIDCO	so far 68 proposals with proposed employment of 4720 persons and investment of 820 Crores have been recieved on single window portal
I/E Oudra Rampathri	70 Kanals	Handed over to SICOP	
I/E Chaki Aziz Shah	18 Kanals and 9.5 Marlas	Handed over to SICOP	
I/E Airpora	70 Kanals	Handed over to SICOP	
I/E Alamganj	82 Kanals	Handed over to SICOP	
I/E Sugan	52 Kanals	Handed over to SICOP	
I/E Ferripora	100 Kanals	Handed over to SICOP	
I/E Reshnagri	65 Kanals and 06 Marlas	Handed over to SICOP	
Total	957.775 Kanals		

Source DIC Shopian

Sr No	Head	Unit	Particulars
1.	REGISTERED INDUSTRIAL UNIT	NO.	138
2.	ESTIMATED AVG. NO. OF DAILYWORKER EMPLOYED IN SMALLSCALE INDUSTRIES	NO.	508
4.	TURNOVER OF SMALL SCALE IND.	IN LACS	552.69

Source DIC Shopian

❖ Export Scenario of Jammu and Kashmir



Jammu and Kashmir, known for its breathtakingly beautiful landscapes, it's also rich in various natural resources and crafts, which opens significant export opportunities. A large number of agricultural and horticultural products such as apple, saffron, walnut, basmati rice, mushkbudji rice etc., from the region is popular across the globe. Other products like walnuts, almonds, cherry, and various other fruits and dry fruits are also exported. The region is also known worldwide for its splendid handcrafts. Products like pashmina shawls, carpet, silk, tweeds, Kashmir willow crickets and various wooden artifacts are largely exported to different parts about the globe.

Jammu and Kashmir's rich biodiversity is home to several medicinal plant species which are exported for pharmaceutical purposes. Minerals like gypsum, limestone, sapphire, granite and other decorative stones also make up the export list of Jammu and Kashmir.

Though not technically counted under traditional exports, tourism can be considered as an export in the service sector. The exquisite natural beauty, rich cultural heritage, and adventure opportunities have attracted tourists from around the world. The demand for tourist services generates substantial revenue for the region.

In the year 2022-23, J&K has exported products worth INR 1,337 Cr which of which Industrial Products such as medicaments, industrial chemicals, cotton / woollen / silk yarn contributed to about 66.2% of the total export, where as agri and horticulture products contributes to about 10.2% and Handloom & handicraft products was about 19.6%. In the year 2023-24, the export value of the UT is expected to be increase by atleast 15% due to increase in the industrial production.

❖ Jammu and Kashmir EPI Index

Jammu &Kashmir has emerged as one of the best performers in the currently and currently ranks 17th position among all states/UT's and 2nd among UT's in Third Edition of Export Preparedness Index for Financial year 2022 issued by Niti Aayog. J&K recorded an improvement in its score rising to 47.49 from previous scores of 30.07. ***The UT of Jammu and Kashmir needs to improve bigtime on parameters like Access to finance for exporters, Trade Support, Transport connectivity, Export infrastructure, Growth & Orientation & R&D Infrastructure***

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❖ Apple Industry in Jammu and Kashmir

Jammu & Kashmir is the largest producer of apples and contributes about 75% of the total produced in India. The largest employment generator in Jammu & Kashmir is the apple industry, providing 400 man-days per year per hectare, employing 3.5 million people, and earning about 10% of its GDP. Jammu & Kashmir has tremendous potential for enhanced production and export of quality apples. Kashmiri apple is famous both in taste and appearance. It has gained fame in the export markets but does not fetch good returns due to many reasons. Apple contributes 60-65% to the total horticultural crop production in Jammu & Kashmir from an acreage of over 50 percent. The apple production sector is the backbone of the rural economy because the majority of the population in rural villages is involved in this sector. The total apple production in Kashmir in the years 2020-2021 according to the Directorate of Horticulture J&K was **2026472 Metric tonnes** of apples. The major producer was the valley of Kashmir.

Apple is farm-based, labour intensive and commercially attractive economic activity. The income per acre is much higher than any other horticulture crops, if it is done in systematic way. Apple production plays an important role in improving the standard of living, per capita income and employment generation. The improvement in production is quite important, but the marketing has equal importance to develop a commercial crop. It has been found that the farmers face numerous problems like marketing, storage facilities, good quality pesticides, irrigation etc which contributes a lot for low production. It has been suggested that if these facilities are provided, productivity could be enhanced & improved like in other major Apple producing Counties. There are mainly seven types of Kashmiri Apple grown in Kashmir. The types of apples grown in Kashmir are mentioned below:

▸Ambri Kashmir

Ambri is the most popular and considered to be the indigenous production of apple in India grown in Himalayan hills. It is widely famous for its crispiness, aroma, flavour and attractiveness.

▸American Trel

This kind of Apple is small and round shaped and quite juicy. American Trel is very crispy and sweet in taste. The skin of the fruit is white greenish and sweet.

▸Delicious (Red Delicious)

Delicious or Red Delicious Apple is a world-popular and most widely grown variety of apple in Sopore region in Kashmir. Colour of the skin is blush red and the texture is smooth. Flesh of the Red delicious apple is greenish white and grained, sweet and juicy.

▸Maharaji Apple

Maharaji Apple is a large sized apple with bright red colour on a green base. has some conspicuous dots. Skin of the fruit is crisp, juicy, and aromatic yet taste is bit acidic.

▸Hazaratbali Apple (Benoni)

Hazaratbali Apple is a medium sized apple, and its shapes may vary from round to slightly conical. Colour of the fruit may differ from red colour to stripe with a tender skin. Skin of this apple is sweet and juicy. This variety cannot store for a longer period and has small shelf life. is consumed in large quantities in the country.

▸Golden delicious apple

Golden delicious apple is a conical shaped, small and medium sized fruit popularly known for its freshness and longer shelf life. is crisp, white, juicy, and thick which is green in color & turns yellow on ripening. Its Sweet taste and smoothness make it an excellent ingredient of dessert.

The approximate percentage of A, B & C grade Apple is given below:

A Grade Apple	40%
B Grade Apple	30%
C Grade Apple	30% (Including culls & pre- falls)

India ranks seven in world apple production with a share of only 3% among all fruit crops. Jammu & Kashmir boasts of around 75% share of total apple produced in the country. Apple cultivation and its value chain is one of the main stays of rural economy with revenue of around Rs. 1500 crores. The apple production is predominantly confined to districts of Srinagar, Ganderbal, Budgam, Baramulla, Kupwara, Anantnag and Shopian in Kashmir province whereas districts of Udhampur, Doda, Poonch, Ramban and Reasi also report apple cultivation on smaller scale.

Jammu & Kashmir has tremendous potential for enhanced production and export of quality apple. The productivity of apple at present is around 11 MT/hectare compared to over 40 MT/hectare in Italy, Chile, France, etc. In order to achieve the stated goal of doubling the farmer's income, there is tremendous scope for improvement in the cultivars of apple by introducing improved varieties to enhance per hectare productivity. At the same time, there is need to bridge the gap between the required and existing capacity of the Controlled Atmosphere Cold Storages. Besides this, the value chain in the form of grading, sorting and packing is an area where we can add tremendous value for better returns for growers and other stakeholders.

The U.T. Administration has embarked on the path of bringing a paradigm shift in cultivation, harvesting and marketing of apple and other fruits by introducing High Density Plantation. This is an historic intervention that would benefit over 10 to 15 lakh families and also position the country in the map of one of the largest apple growing countries in the world.

❖ ODOP & District as Export hub Overview

The One District One Product (ODOP) initiative, coupled with the concept of developing districts as export hubs, aims to boost the economy of specific districts in India by focusing on their unique products and capabilities. The ODOP program identifies and promotes a particular product or craft that a district is known for, leveraging its traditional knowledge, skills, and resources to drive economic growth.

Under the ODOP framework, each district is encouraged to specialize in a specific product or craft and develop it as a potential export item. This approach helps in harnessing the local talent, improving the quality and competitiveness of the product, and creating a brand identity for the district. By promoting these products

on national and international platforms, the government aims to enhance market access and increase export potential.

The concept of developing districts as export hubs aligns with the broader vision of boosting India's exports and achieving economic self-reliance. By focusing on specific districts and their unique products, the government aims to create self-sustaining economies at the local level, generate employment opportunities, and improve income levels. The development of infrastructure, technology, and market linkages in these districts further supports the growth of export-oriented industries.

To support the ODOP and export hub initiatives, the government provides various forms of assistance to the districts, including financial support, skill development programs, technology upgradation, marketing and branding support, and infrastructure development. These measures aim to create an enabling ecosystem for local businesses and entrepreneurs to thrive and expand their presence in domestic and international markets.

The ODOP and district as export hub initiatives are designed to promote inclusive growth by harnessing the unique potential of each district in India. By focusing on specific products and crafts, these programs aim to create employment opportunities, reduce regional disparities, and enhance the overall competitiveness of Indian exports. The success of these initiatives lies in effective implementation, coordination between various stakeholders, and continuous support from the government and industry to ensure sustainable growth and development in the identified districts.

ODOP Product of District Shopian: Apple

In the context of the One District One Product (ODOP) initiative, the district of Shopian in Jammu and Kashmir, India, has identified apples as its primary ODOP product. Shopian is known for its high-quality apple orchards and has a long-standing history of apple cultivation.

The ODOP program in Shopian focuses on enhancing the production, quality, and marketing of apples to position them as a unique and competitive product in domestic and international markets. The district administration, in collaboration with various stakeholders, provides support to apple growers in terms of technical assistance, infrastructure development, access to credit, and market linkages.

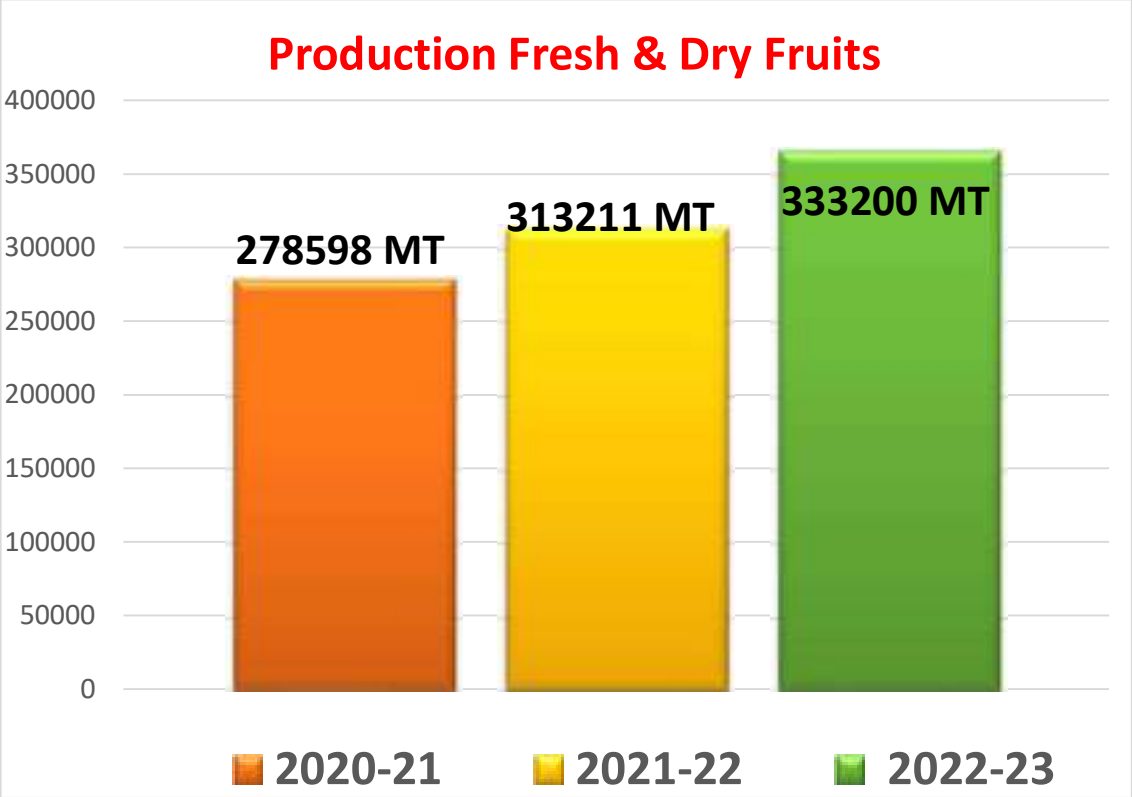
The ODOP approach in Shopian aims to improve the overall apple value chain, including pre-harvest activities, post-harvest handling, processing, packaging, and marketing. Efforts are made to adopt modern cultivation techniques, improve orchard management practices, and promote organic farming methods to ensure the production of premium-quality apples.

To enhance market access and increase exports, the district administration works on branding and promoting Shopian apples. This includes developing a unique identity for Shopian apples, creating awareness about their superior quality and taste, participating in trade fairs and exhibitions, and exploring potential export markets.

The ODOP program for apples in Shopian not only supports the economic growth of the district but also contributes to the overall development of the apple industry in Jammu and Kashmir. It helps in generating employment opportunities, improving the income of apple growers, and strengthening the socio-economic fabric of the region.

By focusing on apples as the ODOP product, Shopian aims to leverage its natural resources, traditional knowledge, and expertise in apple cultivation to establish itself as a prominent apple-producing district in the country. The ODOP program provides a platform for apple growers to showcase their produce, gain market recognition, and contribute to the sustainable development of the region's agricultural sector.

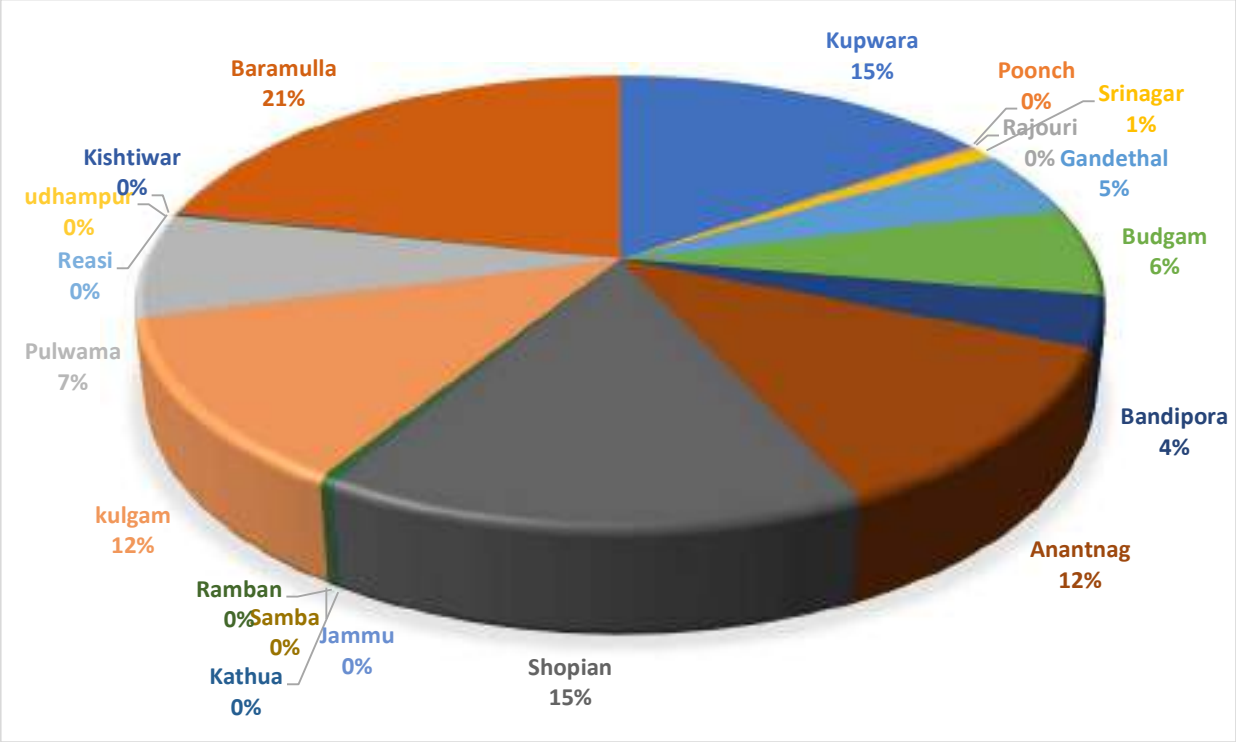
Kind of Fruit	2022-23		Est. Prod. (2023-24)
	Area (Hects)	Production (M.Ts)	(M.Ts)
Total Fresh	22967	347724	289622
Total Dry	3274	17702	17345
Total Fresh + Dry	26241	365426	306967
No of orchardists			47145



Year wise Production of Apple in Jammu & Kashmir

District Wise Production of Apples in Jammu & Kashmir Production in MTS Tons																				
	Srinagar	Ganderbal	Budgam	Baramulla	Bandipora	Kupw	Anantnag	Kulgam	Shopian	Pulwa	Jmu	Samb	Kathua	Udhpu	Reasi	Doda	Kishti	Ramban	Rajouri	Poonch	Total
Year 2017-2018	18708	87576	121612	403796	68205	28662 8	223893	223893	268404	136389	0	0	1718	2442	1760	0	4137	7330	2916	2008	1881790
Year 2018-2019	19231	91955	143270	404089	69358	28621 5	230019	213653	272626	138407	0	0	1523	2442	1736	8363	3891	7480	3283	2008	1879079
Year 2019-2020	20205	91955	153356	479579	59385	28348 6	259859	207873	276226	172112	0	0	1821	2470	1860	8022	4249	7416	3511	2035	2829472

Source: Horticulture Department



Production of Apples in Different Districts of Jammu and Kashmir

SWOT Analysis of Apple (product)

Strengths	Weakness
• Large scale cultivation ofApples from last 60- 80 years • The UT of Jammu andKashmir is the largest apple producing state in India • Better Connectivity and road infrastructure. • Naturally best suited sites for Apple cultivation • Easy supply of good planting material • Cheap Labor availability • Continuous increasingdemand of Apple • E-commerce platforms like ONDC, GeM, etc.	• Improper and less know- how about Apple Orchard Management • Lack of proper grading and standardization • Improper use of spray, chemicals, insecticides &pesticides • Traditional method of production • Inadequate packaging and labelling • Lack of facility of processing • Degradation of old Apple Gardens • Shortage of CS & CA stores • Lack of proper dialogue with Govt. agencies,research organization, universities and others • Shortage of skilled labor • Lack of distribution/consolidation centers

Opportunities	Threats
• Marketing through self- help groups corporation, different sameti & other corporations • Value addition by privatesector for Apple orchard management • Opportunities for re – establishment of Apple orchards • Huge Export Potential. • High Density Programe for apples. • Creation of infrastructure under High Density Apple Programe • New Emerging industrial estates.	• Absence of adequate Post Harvest Management • Absence of adequate Nutrition Management • Illegally import of Iranian apples flooding theIndian market. • Environmental concerns • Aggressive use of pesticides and fertilizers.

❖ SWOT Analysis of District Shopian, Jammu and Kashmir

Strengths:

Historical Significance: Shopian has a rich historical heritage dating back to the Mughal era, with its connection to the Mughal Road and significant landmarks like the Imam Shahi Hamadan's entry.

Scenic Beauty: The district's lush green forests, especially in areas like Sedow, Hirpora, and Keller, offer picturesque landscapes that can attract tourists.

Agricultural Potential: The district is known as the "Apple Bowl" of the state due to its strong horticulture sector, particularly apple cultivation, which is a major source of income and employment.

Tourism Potential: The historical monuments, natural beauty, and the potential for trekking, photography, and adventure activities contribute to its tourism potential.

Cultural and Religious Significance: The presence of the "Holy Relic" of Prophet Mohammad (SAW) and various religious sites adds to the cultural and religious significance of the district.

Strategic Location: Situated on the Mughal Road, Shopian has the advantage of being well-connected to neighboring districts and serving as a transit point.

Weaknesses:

Limited Infrastructure: The district might lack modern infrastructure, which can hinder tourism development and economic growth.

Seasonal Accessibility: Some areas become inaccessible due to heavy snowfall during winters, impacting connectivity and economic activities.

Educational Facilities: There may be gaps in educational facilities, especially in remote areas, leading to a potential dropout rate among students.

Limited Industrialization: Overdependence on agriculture, specifically apple cultivation, could lead to economic vulnerability if there's a decline in the agriculture sector.

Opportunities:

Tourism Development: Developing tourist villages and promoting cultural and natural heritage can boost tourism, generating revenue and employment opportunities.

Infrastructure Improvement: Investing in better roads, bridges, and connectivity can facilitate year-round access to different parts of the district.

Diversification of Economy: Exploring other sectors like handicrafts, small-scale industries, and eco-tourism can diversify the economy and reduce dependency on agriculture.

Educational Enhancement: Improving educational facilities and introducing vocational training programs can enhance human capital and reduce unemployment.

Heritage and Cultural Tourism: Leveraging the historical significance and religious sites can attract pilgrims and history enthusiasts, contributing to economic growth.

Threats:

Security Concerns: The region's sensitive geopolitical situation could impact tourism and investments.

Climate Change: Unpredictable weather patterns and climate change can affect agricultural yields and disrupt normal life.

Environmental Degradation: Deforestation and unsustainable practices could damage the ecosystem and hinder the potential for eco-tourism.

Infrastructure Challenges: Insufficient infrastructure can deter potential investors and tourists, limiting economic growth.

Dependency on Agriculture: Overreliance on apple cultivation makes the economy vulnerable to market fluctuations and climate-related risks.

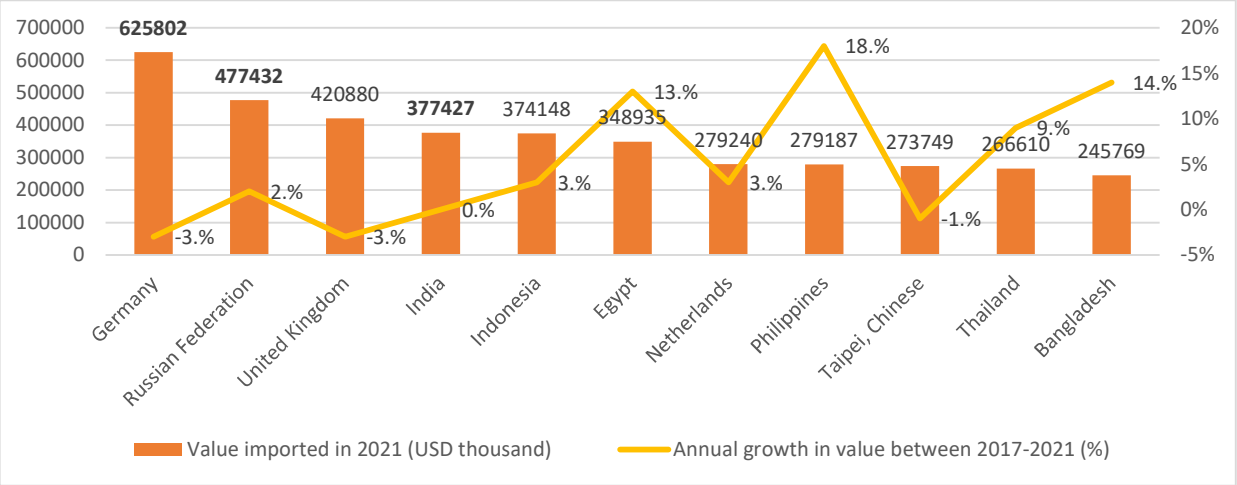
Lack of Awareness: Insufficient promotion and marketing of the district's potential can limit its recognition and attractiveness to tourists and investors.

❖ Opportunities in Apples

Following HS Code has been used by districts of J&K to export Apples.

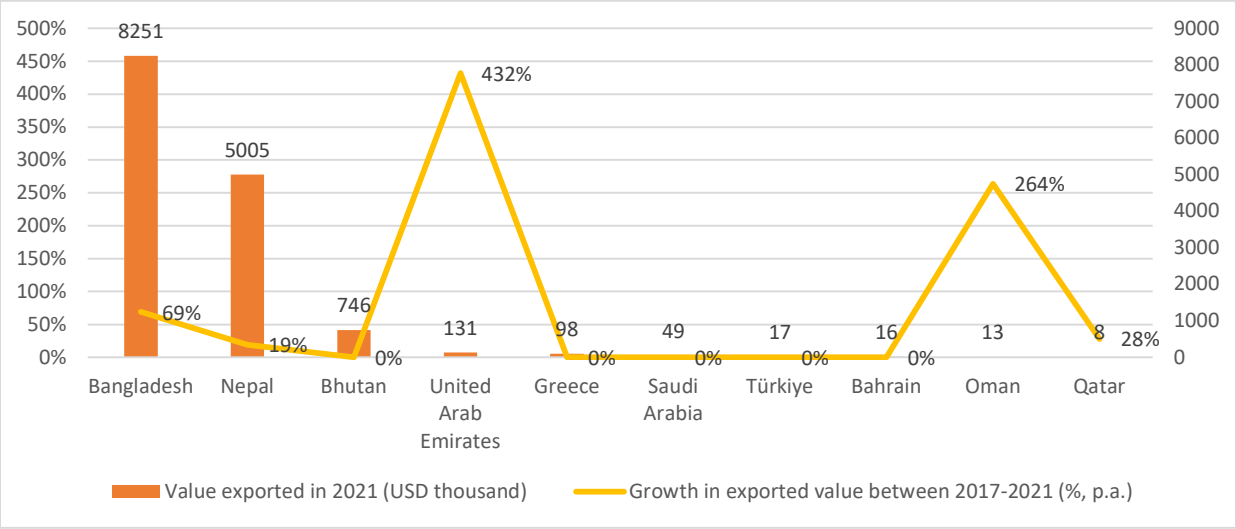
HS codes	Description
080810	APPLES FRSH

Top Importers of the APPLES FRSH under the HSN Code 080810

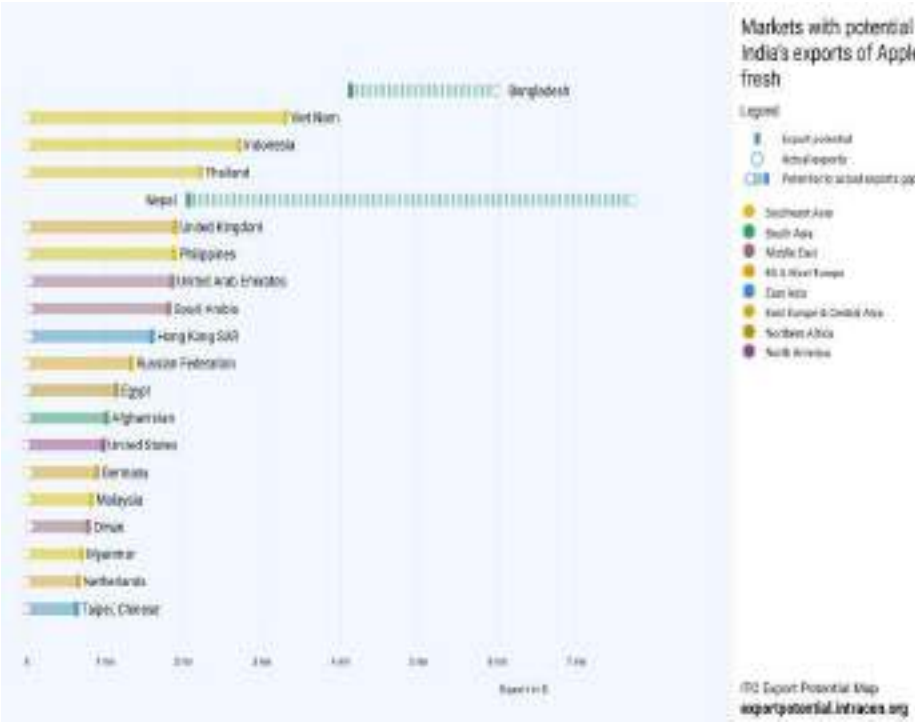


The graph shows that Germany (625802 USD thousand), Russia, UK and India are top importers of fresh apple for 2021. The annual growth of imports is -3%, 2% ,-3% & 0% respectively.

Top Countries to whom India Exports APPLES FRSH under the HSN Code 080810.



The graph shows that India exports most of Apples to Bangladesh (8251 USD thousand), Nepal, Bhutan & UAE. There has been almost 70% & 20% increase in exports to Bangladesh and Nepal Respectively



Key Fact of Export

Value of world exports in 2021

8,038,204 (USD Thousand)

9,100,718 Tones

Total Exports from India in2021

14,345 (USD Thousand)

29,050 Tones

Total export from J&K in 2021

0.002576 (USD Thousand)

Current Market Share of Apple exports to other countries

Country of Export by India	Market Share
Bangladesh	51.3%
Nepal	41.9%
Bhutan	5.5%
United Arab Emirates	0.5%
Iran, Islamic Republic of	0.2%

Market Share of Top countries in export of apples

Country	Share in World's Exports, % in 2018	Share in World's Exports, % in 2019	Share in World's Exports, % in 2020	Share in World's Exports, % in 2021	Share in World's Exports, % in 2022
China	17.1	16.9	18.9	17.8	15.7
Italy	10.7	11.3	12.6	13.1	13.8
United States of America	13.4	13	11.1	11.4	13.4
New Zealand	7	7.7	7.7	7.4	8.6
Chile	9	8.2	7.4	7.3	8
South Africa	5.1	5.1	5.3	6	7.4
France	7.5	5.9	6.3	5.5	6.1
Poland	5.2	5	4.4	5.2	4.8
Türkiye	1.2	1.2	1.4	2.2	2.5
Japan	1.7	1.8	1.3	1.8	2.2
Netherlands	3.8	2.5	3.3	2.8	1.9
Serbia	1.3	1.6	1.6	1.6	1.6

Outcome:

- **Immediate Markets:** These below are those countries where a proper marketing channel will unlock the potential of that market in very short period.
  - Based on Signed FTAs the following can be targeted: **UAE, Saudi Arabia, Thailand, Nepal**
  - High Growth Markets: **Vietnam, Indonesia Thailand,**
- **Long Term Markets :** The following countries **Vietnam, Indonesia Thailand** come under Long-term priority market as these are those markets where the untapped market potential can only be fulfilled if J&K exporters comply and raise the quality of the product to the highest standards, freight rates are more subsidized and major efforts is required in marketing which will require time to accommodate the same.

❖ District Apex and District Level Committee

To promote export from the UT, J&K has constituted Apex Level Export Promotion Committee and District Level Export Promotion Committee. Mentioned below is the composition of

Apex Level Export Promotion Committee

1	Commissioner/ Secretary to the Government, Industries and Commerce Department (Export Commissioner)	Chairman
2	Manager Director, J&K Trade Promotion Organization (JKTPO)	Member Secretary
3	Divisional Commissioner Jammu and Kashmir	Member(s)
4	Representative of Ministry of Micro, Small & Medium Enterprises (MSME), GoI	Member
5	Representative of Director General of Foreign Trade (DGFT), GoI	Member
6	Director, Industries and Commerce, Jammu/Kashmir	Member(s)
7	Director, Handloom and Handicraft, Jammu/Kashmir	Member(s)
8	Director, Planning, Industries and Commerce Department	Member
9	Secretary/Chief Executive Officer, J&K Khadi & Village Industries Board	Member
10	Representative of Agriculture Production Department(not below the rank of Director)	Member
11	Representative of Horticulture Department(not below the rank of Director)	Member
12	President Lead Bank	Member

Terms of reference

- To coordinate with the district admin in each district of the UT to promote District as an Export Hub
- To coordinate with all the departments of UT and Central government to resolve issues related to exports.
- To assist the UT government in formulation/Implementation of Export policy/Strategy

District Level Export Promotion Committee

1	District Development Commissioner	Chairman
2	General Manager, DIC	Member Secretary
3	Chief Agriculture Officer	Member
4	Chief Horticulture Officer	Member
5	District Lead Bank Manager	Member
6	Assistant Director, Handicraft	Member
7	Assistant Director, Handloom	Member
8	District Officer, J&K KVIB	Member

Terms of reference

1. Benchmarking baseline export performance of the district current-situation
2. Identification of potential export products from the district
3. Create a district level export action plan with quantifiable targets
4. Identification of the bottle necks for the export of potential products.
5. Act as one point facilitator for export promotion at district level

❖ Challenges & Interventions

Value Chain Activity	Gaps Identified	Recommended Interventions	Remarks / Rationale
Pre-harvest management	Inferior quality planting material (virus and pest infested)	- Establishment of hi-tech protected nurseries in the identified cluster. - Upgradation of existing nurseries; make NHB accreditation mandatory	Well-equipped nurseries with protected facilities, improved high-quality rootstocks, and virus indexing provision.
	Spurious and unlabelled pesticides sold in the market; poor departmental surveillance due to lack of testing facilities	- Establishment of laboratories for MRL, pesticide, and chemical quality testing in PPP mode. - Regular sampling and testing to deter dealers from selling poor quality chemicals	Ensures the availability of quality-tested pesticides in the market.
	High-density plantation is expensive for growers (costing about Rs 8 lacs per acre)	- Subsidy at 50% extended to all growers willing to have high-density plantation	High-density plantation yields higher productivity (16 MT per acre) in a shorter gestation period (3 years).
	Lack of knowledge of the latest practices and technical know-how for high-density plantation and precision farming	- Provide special training through capacity-building programs for farmers. - Allocate sufficient funds and staffing of experts to state horticulture departments for outreach and training	Empowers farmers with the latest agricultural practices.
Post-harvest (Primary Processing)	Insufficient primary processing units	- Establishment of primary processing units (Packhouses and CA stores)	CA storage of 50-60% of the produce helps avoid glut, ensuring better market conditions.
	Waxing is not applied locally, impacting shelf life and presentation	- Facilitation of waxing, allowing the use of more effective waxes like Theobendazole and Imazalil	Waxing plant required for quality fruit storage and transportation.
Processing (Secondary and Tertiary)	Limited capacity for secondary processing compared to available culled apple	- Establishment of green-field secondary processing units	Processing C-grade apples encourages farmers to segregate low-quality fruit, creating value-added products.
	Processing technology for high-value products not locally available	- Establishment of tertiary processing and by-product utilization (Pomace)	Extraction of valuable products addresses disposal issues and enhances processing unit viability.
Marketing	Smooth flow of traffic hampered by avoidable stoppages en-route	- Provide unique ID or permission certificates to transporters	Ensures timely delivery, preventing quality deterioration during transit.
	Unavailability of rail logistics	- Study viability of starting Kisan train between Jammu and metro markets	Kisan train may provide a faster and cost-effective transportation alternative.
	Lack of facilities in existing market yards	- Provide additional facilities like cold stores, conveniences, guesthouses	Improved facilities attract buyers and help in mitigating gluts through short to medium-term storage.

❖ Hard Interventions

The Hard interventions required for increasing the exports from District Shopian, Jammu & Kashmir are:

1. Infrastructure availability for Exports of apples

CA storage facility:

Production figures of Apple in Shopian District

Production of Apple in district Shopian from last 5 years					
Year	2018-19	2019-20	2020-21	2021-22	2022-23
Production (in Mtns)	303219	276226	253702	288616	337756
No of Farmers	46614	46620	46620	46650	47145

Source: Department of Horticulture, Shopian

The installed CA storage capacity in Jammu and Kashmir is 1.5 Million MT which is presumed to have increased to 1.8 Million MT. The UT currentlyhas 32 CA Storage units as listed below:

CA Storage Units in J&K			
S.no	District	Units	Cumulative Capacity (MT)
1	Pulwama	18	89000
2	Baramulla	6	25500
3	Shopian	5	25500
4	Srinagar	1	10000
5	Kupwara	1	5000
6	Jammu	1	784
	Total	32	155284

Because of non-availability of required number of CA stores, many growers after harvesting apple, store them in orchards with huge spoilage because of dampness, high temperature and humidity problems. Overall, 10 to 25 percent of fruits get destroyed in this way. Besides, the quality of the produce is also affected adversely due to lack of cold storage facilities and the chances for damages to the fruits. The grower's capacity to hold stock for better prices during off-season also gets considerably reduced when storage facilities is minimal. These facts compel the growers to dispose off their produce in the shortest possible time. This situation

naturally leads to a slump in the market prices and thereby the growers fail to harvest good prices. Extended storages facilities in the potential areas at the block/tehsil level may prolong the marketing season and may prove beneficial to the growers. An important concern CA stores and the processing plants face that they incur high power expenses. The scope lies for cost reduction if power could be supplied to the plants continuously at a realistic rate. At present, the processing plant runs on diesel because of non-availability of continued power supply.

- **District shopian produces 337756 MTns and have capacity to store apples in CA store only upto 25500 Mtns.**
- **District Shopian alone needs to have CA storage for almost 3 Lakh MT for apples in coming years to store the apples for off seasons.**
- **The approximate cost for the establishing a CA store unit of 500 MT capacity would be almost INR 8 to 10 Cr.**

Transportation Strategies:

For domestic marketing, the usual supply chain involves transportation by road or air, while in export marketing, the supply chain typically relies on air or water transportation. In Jammu and Kashmir, there is a rail connection to Katra Station; however, there is currently no infrastructure available for the transportation of apples in that area. The Indian Railways is anticipated to establish a connection between Banihal and Baramulla at the beginning of the next year. This development is expected to significantly decrease the cost and time involved in transporting apples and other apple-derived products from Jammu and Kashmir, enabling them to reach their targeted markets more efficiently.

Developing effective transportation strategies for apple export in District Shopian involves considering various aspects of logistics, infrastructure, and coordination. Here are some strategies that could enhance transportation for apple export in the district:

1. Transportation Infrastructure Improvement:

    - Upgrade and maintain existing roads connecting apple orchards to transportation hubs.
    - Explore the possibility of building new roads or widening existing ones to facilitate smoother movement of apple produce.
    - Ensure regular maintenance to prevent disruptions during peak harvesting and transportation seasons.

- 20 lakh MT of fresh fruit is exported outside Jammu & Kashmir annually. There is a requirement of refer vans (Refrigerated Transport) of carrying capacity of 16 MT
- Refrigerated transport using reefer vans will be a necessity when the fruits are stored in CA stores. Under such situation we have to introduce 20 such reefer vans with a capacity of 10 tons each. When their functionality is established, more private sector investments will flow in refrigerated transport.
- Twenty-seven automated sorting, grading and packing facilities each with capacity to handle 2 tons of apple per hour are also needed. When linked to CA stores or cold stores these lines would offer a complete packing cum storage solution to farmers

2. Collaboration with Transportation Agencies:

    - Foster partnerships with transportation agencies to streamline the process and ensure reliable and timely transportation services.
    - Negotiate favourable transportation rates and explore the possibility of dedicated transportation services for apple exports.
3. Technology Integration:

    - Implement tracking technologies to monitor the movement of apple shipments in real-time.
    - Utilize temperature-controlled transportation and monitoring systems to maintain the freshness and quality of the apples throughout the journey.

4. Grower Training and Coordination:

    - Provide training to apple growers on optimal harvesting and packaging practices to reduce post-harvest losses during transportation.
    - Establish a coordinated system where growers can efficiently communicate their transportation needs and schedules.
    - Cooperatives can negotiate better rates, share transportation resources, and collectively invest in transportation infrastructure.

5. Promotion of Alternate Transportation Modes:

- Explore alternative transportation modes, such as rail or air, for long-distance exports to ensure faster and more reliable delivery.

6. Customs and Documentation Assistance:

    - Provide assistance to apple growers in completing customs documentation to expedite the export process.
    - Streamline customs procedures to minimize delays at export points.
    - Align transportation strategies with market demand and shipping schedules to optimize export efficiency.

Key Infrastructure required for export

- **Quality Control and certification agency:** Export Inspection Council (EIC) is the nodal agency for quality control and inspection for exports.
  The EIC is assisted in its functions by the Export Inspection Agencies (EIAs) located at Chennai, Kochi, Kolkata, Delhi and Mumbai having a network of 38 sub-offices and laboratories to back up the pre-shipment inspection and certification activity. In addition, EIC also designates inspection agencies and laboratories to supplement its own activities as required. There must be easy access to certification and inspection agencies. The process to get quality certificate must be smooth and time bound. At designated places like District headquarter shopian and at block levels the agencies must be easily accessible.

- **Common Facility Centre (CFCs):** There is need to have a Common Facility Center with separate import export yard for apple exporters.
  Govt. of India have approved **Apple cluster for Shopian worth Rs 135 Cr under Cluster Development Programme.**
  The Shopian Apple Cluster envisages development of Shopian Apple on three verticals including pre-production-production, post-harvest management and value addition and logistics, marketing and branding to make it globally competitive. The project is expected to be implemented in four years and it is expected to transform the landscape of the horticulture ecosystem of Shopian district.
  The project is estimated to cost Rs 135.23 crore, of which, about Rs 37.05 crore would be provided by the MoAFW as grant-in-aid. The Implementing Agency (FIL) shall provide equity to the tune of Rs 29.91 crore and raise a term loan of Rs 68.27 crore.

- **Establishment of information centres:** Market information centres should be established Which will provide the apple fruit growers day to day information and Vital information on marketing, viz., demand, price, market, export etc.

- **Packaging techniques:** According to the World Packaging Organization (2008), the most important consumer packaging are made of paper and board (38%), followed by plastic (30%) with rigid plastics alone taking an 18% share, metal (19%), glass (8%), and others (5%). Moreover, approximately 70% of overall consumer packaging are used in food industry where 48% of all the packaging are made from paperboard.

  For horticultural food products such as fruit and vegetables which remain alive after harvest, the use of ventilated packaging is essential to facilitate the delivery of cold air to produce inside the packaging during precooling and refrigerated storage. The design challenge is to balance the cold chain requirements for optimum airflow while maintaining the mechanical integrity of the package and produce. Given that the marketability of fresh produce is reduced when precooling is delayed, resource-efficient package design for optimum cooling without adverse effects on produce quality are essential for cost-effective postharvest handling and marketing of fresh horticultural foods.

<u>Smart packaging:</u>

Smart packaging refers to an improved packaging system with functional attributes that add benefits to the food product and subsequently the consumers. Smart packaging uses an integrated approach with mechanical, chemical, and electrical driven-functions to ensure an improved usability of food products. Some of the prominent facets of smart packaging include use-by dates, usage of self-heating or self-

Layered package

Bulk package

A pallet of packages

cooling containers with electronic displays storage temperature, and nutritional information of the product.

Active packaging:

Active packaging is categorized into active scavenging systems (absorbers) and active releasing systems (emitters). Under scavenging packaging system, unwanted compounds such as oxygen, excessive moisture and ethylene which accelerate the spoilage process in foods are removed from the product. For instance, oxygen may cause off-flavours, nutrient loss (through oxidation) and colour changes; hence the usage of oxygen scavengers to maintain quality and extend shelf life of some food products

Feasible Ports for Export of apples.

Apple growers in Kashmir can utilize various export ports in India to transport their produce to international markets. Some of the key export ports that can be accessed by apple growers in Kashmir include:

1. Chennai Port (Tamil Nadu):
    - Chennai Port is a major hub for exports in South India.
    - Provides connectivity through road, rail, and air transport.
    - Equipped with container terminals and facilities for handling diverse cargo.

2. Kolkata Port (West Bengal):
    - Kolkata Port is a major port on the eastern coast of India.
    - It serves as a gateway to markets in Southeast Asia and beyond.
    - Well-connected through road and rail networks.

3. Cochin Port (Kerala):
    - Cochin Port is strategically located on the southwest coast of India.
    - Has good connectivity to the Western Ghats, facilitating transportation from the Kashmir region.
    - Equipped with container terminals and modern cargo-handling facilities.

4. **Visakhapatnam Port (Andhra Pradesh):**
    - Visakhapatnam Port is a major port on the east coast of India.
    - It provides connectivity to the northern regions through road and rail networks.
    - Offers container handling facilities for export shipments.

5. **Krishnapatnam Port (Andhra Pradesh):**
    - Krishnapatnam Port is a modern, deep-water port.
    - Located on the east coast, it provides access to international markets.
    - Equipped with state-of-the-art facilities for efficient cargo handling.

Apple growers in Kashmir can choose the port based on factors such as proximity, transportation infrastructure, and specific market destinations. It is advisable to coordinate with logistics experts and shipping agencies to determine the most suitable port for exporting apples based on their specific requirements and market considerations.

Cargo Services for Apple Exports :

To address the existing gaps and enhance the apple export value chain in District Shopian, the implementation of specialized cargo services is proposed. The following key interventions can significantly contribute to the improvement of cargo services for apple transportation:

- **Dedicated Cargo Hubs**: Establish dedicated cargo hubs in strategic locations within District Shopian. These hubs should be equipped with modern facilities, including cold storage, sorting, and packaging units to ensure the quality and freshness of the apples during transit.
- **Customized Transportation**: Introduce cargo services specifically designed for apple transportation, incorporating features such as temperature-controlled containers and specialized vehicles to maintain optimal storage conditions throughout the journey.
- **Collaboration with Logistics Providers**: Partner with reputable logistics companies with expertise in perishable goods transportation. Establishing collaborations can bring in specialized knowledge and resources to streamline the transportation process.
- **Technology Integration**: Implement tracking technologies to monitor the movement of apple shipments in real-time. This ensures transparency,

traceability, and timely interventions in case of any deviations from the planned route or schedule.

- **Government Support**: Advocate for government support and incentives to encourage the development of cargo services for apple exports. This may include subsidies for infrastructure development, tax incentives, and regulatory support to facilitate seamless operations.
- Training and Capacity Building: Provide training programs for workers involved in the cargo services, focusing on best practices for handling and transporting apples. Capacity building initiatives will contribute to the overall efficiency and professionalism of the cargo service workforce.

2. High Density Plantation Programme for apples:

At present a traditional orchard can accommodate not more than 250 plants per hectare. Monoculture of old and traditional cultivars, senile orchards and non-availability of high quality cultival spectrum has lead to low productivity and poor quality which needs rejuvenation and replacement with new emerging cultivars. Introduction of Clonal fruit stock and the Quality Planting Material (QPM) prepared from the improved genetic lines would increase number of plants per hectare to 3333. This would enhance the productivity by 3-4 times and reduce the gestation period for early harvest for the farmers.

In last three years, High Density Plantation has been attempted and around 250-hectare area has been covered with participation of the private sector. However, there is tremendous scope to fast-track creation of apple orchards with high and medium density root stock. **The scheme announced by the UT Administration envisages (Targets) coverage of around 5500 hectares in coming 05 years (2026) with an estimated investment of around Rs. 1750 crores and production to increase by 30 %.** In order to sustain these efforts it is also proposed to set up atleast four Hi-Tech Nurseries with pre-quarantine facility and modern virus indexing labs so as to ensure continuous supply of QPM at much affordable rates. **NAFED,** which is National Level Agency of Govt. of India, has been roped in to facilitate the efforts of J&K Administration in this regard.

The HDP Programme is bound to bring a paradigm shift in the whole Horticulture ecosystem and intrinsically link the sector with markets in India and abroad. It would act as a precursor to create modern infrastructure in the value chain besides creating huge employment opportunities for all the stakeholders starting from growers to cold storage industry and traders. Some of the important focus areas of the programme are:

- Enhancement of area coverage under apple and other temperate fruits with improved varieties.
- Increase in production and productivity.
- Creation of smaller hi-tech nurseries at Block/Tehsil Level with participation of private sector.
- Collectivisation of farmers/growers having small and fractured land-holdings, in the form of Farmers Producer Organizations (FPOs). Jammu and Kashmir has already joined this programme and specialised crop-specific FPOs have been created in all the Districts.
- Setting up of three cold chains with latest facilities for sorting, grading, pre-cooling, processing and refer transport.
- Setting up Pre-Quarantine facilities and virus indexing laboratories at four nurseries of Horticulture Department.
- Provide assured market linkages and better returns for growers and removing layers of middlemen.
- Enhanced productivity and higher percentage of A grade apples and increase the income of farmers three to four times.

High Density Plantation programme for temperate fruits would no doubt be a game changer for the rural economy of Jammu and Kashmir. In the years to come, private sector would have to closely work with the growers and government agencies to bridge the gaps in Research and Development, training and capacity building, creating additional cold chain facilities to sustain the momentum. All stakeholders must join hands and take advantage of other related schemes like Agri Infrastructure Fund, National Horticulture Board, etc. The apple economy would get a boost to a level not seen in last seven decades and India would not only become Atamnirbhar but also export apples in huge volumes.

3. Organic production/organic Certificates for apples:

Organic cultivation of apples in Kashmir, particularly in Shopian district, will be very important. Achieving certification for organic apples often involves following specific standards and guidelines set by relevant organizations. In India, the National Program for Organic Production (NPOP) is the governing body responsible for regulating and certifying organic products, including apples.

Kashmir's natural climate and soil conditions are conducive to organic apple cultivation. The region's cool climate and fertile soil provide a favorable environment for apple orchards.

Organic apple cultivation in Kashmir involves adhering to organic farming practices, which include:

- Avoiding synthetic pesticides, herbicides, and chemical fertilizers.

- Using organic manure, compost, and biofertilizers.
- Implementing natural pest control methods like crop rotation and companion planting.
- Practicing integrated pest management (IPM) techniques.
- Maintaining soil health through practices such as mulching and cover cropping.

NPOP certification is a crucial step for growers in Shopian district who want to market their apples as organic. To achieve NPOP certification, farmers and orchard owners must meet certain criteria and follow the guidelines set by NPOP.

NPOP certification provides several benefits to apple growers in Shopian district:

- Access to premium markets and better pricing for organic apples.
- Enhanced export opportunities, as NPOP certification is recognized internationally.
- Assurance to consumers of the organic quality and safety of the apples.
- Environmental benefits due to reduced chemical usage.

It ensures that apples meet the required organic standards, allowing growers to access premium markets and meet consumer demand for organic and sustainable produce.

4. Proper and adequate irrigation of Apple orchids:

- Given that 76% of farmers rely on canals for irrigation, it is crucial to rehabilitate and expand the existing canal network. This can include desilting, repair of canal infrastructure, and increasing the coverage area of canals to reach more apple orchards.
- While only 8% of farmers currently use tube wells for irrigation, there is an opportunity to expand this source. Encourage and provide support for the installation of more tube wells, especially in areas where canals are not accessible.
- Utilize the existing ponds and promote the construction of additional water storage ponds. Proper pond management and maintenance should be emphasized to ensure a sustainable source of irrigation water.
- Increase the adoption of sprinkle pumps by providing subsidies and technical support to the 4% of farmers who currently use them. Sprinkle irrigation can efficiently use water resources and benefit apple orchards, especially during dry spells.
- Organize training programs and workshops for farmers to educate them on efficient irrigation practices, water conservation, and the importance of timely irrigation for apple production.

- Install weather monitoring stations or provide access to weather forecasts to help farmers make informed decisions regarding irrigation scheduling. This can prevent over-irrigation and water wastage.
- Collaborate with agricultural research institutions to develop and promote advanced irrigation technologies suitable for apple orchards in hilly areas. This may include drip irrigation systems tailored to the needs of apple trees.
- Advocate for government funding and subsidies to support the implementation of these irrigation interventions. This could include financial assistance for infrastructure development and subsidies on equipment like tube wells and sprinkle pumps.

By implementing these interventions, Shopian district can significantly improve its irrigation system, ensuring a consistent and adequate water supply for apple cultivation. This, in turn, can boost apple production, enhance farmer livelihoods, and contribute to the overall agricultural development of the region

5. Testing Lab and Certifications thereof:

Quality interventions for the apple industry in District Shopian, Kashmir, can greatly enhance the quality and competitiveness of the apples produced in the region. Leveraging the existing quality measurement labs and institutions, such as SKUAST-K, the Horticulture Department, and NRCF, is essential. Here are quality interventions required for the apple industry in District Shopian:

- Training and Capacity Building: Organize regular training programs and workshops for apple growers in District Shopian in collaboration with SKUAST-K and the Horticulture Department. These programs should focus on best practices in apple cultivation, post-harvest handling, and quality control.
- Research and Innovation: Encourage and fund research projects at SKUAST-K to develop new apple varieties that are better suited to the local climate and have superior quality attributes. This research should also explore innovative post-harvest management techniques.
- Quality Testing Facilities: Establish modern quality testing facilities in District Shopian, equipped with the latest technology for grading, pesticide residue testing, and disease diagnosis. This will reduce the need for farmers to travel long distances for quality assessment.
- Certification and Grading: Promote the adoption of grading standards and certification procedures for apples in District Shopian. This will help in distinguishing high-quality apples and ensure they meet the required standards for domestic and export markets.

- Quality Assurance Programs: Implement quality assurance programs in collaboration with SKUAST-K, focusing on integrated pest management (IPM), organic farming, and reduced pesticide usage to produce healthier and more environmentally friendly apples.

By implementing these quality interventions and leveraging the expertise of existing labs and institutions, District Shopian can enhance the quality of its apples, increase market competitiveness, and ensure the long-term success of its apple industry.

6. GI tagging (Geographical Indications) Apples:

The Jammu and Kashmir Government has decided to push for Geographical Indication (GI) tagging of 24 different crops and products including Apple (Ambri and Maharaji). The region's apple cultivation dates back centuries, and the unique combination of climate, soil, and traditional farming methods has resulted in apples of exceptional quality and flavor. To protect and promote this cultural and agricultural heritage, Shopian apples if granted a Geographical Indication (GI) tag, offers of benefits for local apple growers:

Recognition of Uniqueness: The GI tag if granted would recognizes that apples grown in Shopian possess distinctive qualities attributable to the region's geographical conditions, including its climate, altitude, and soil composition. This recognition would enhance the reputation of Shopian apples in domestic and international markets.

Market Value: The GI tag if granted would enhance the market value of Shopian apples. It would signify authenticity, quality, and origin, which can command premium prices in both domestic and export markets. Consumers are often willing to pay more for products with a GI tag due to their perceived superior quality and uniqueness.

Market Expansion: With GI tagging, Shopian apples gain access to a broader range of markets. The tag assures consumers of the apples' authenticity and adherence to specific quality standards, making it easier for local growers to establish a presence in national and international markets.

Protection from Imitation: GI tagging provides legal protection against the unauthorized use of the "Shopian" name or any deceptive practices by other regions or producers trying to pass off their apples as genuine Shopian apples. This protection safeguards the reputation and market position of Shopian apples.

Increased Investment: The GI tag can attract investment in the apple industry of Shopian. Investors and stakeholders are more likely to support initiatives aimed at

improving apple cultivation, post-harvest handling, and marketing when they know they are contributing to a unique and protected product.

Cultural Preservation: GI tagging not only protects the apples but also preserves the cultural and historical significance of apple cultivation in Shopian. It ensures that traditional knowledge and practices are passed down through generations.

It not only safeguards the heritage and quality of their produce but also opens doors to new markets and economic opportunities. By getting the GI tag, Shopian can thrive as a hub for premium apple production and uphold its position as a symbol of agricultural excellence in India.

7. Marketing strategies for exports of apples.

- **Build strong brand image:** Create a strong brand image that reflects the quality, authenticity, and uniqueness of Kashmiri apples like GI tag. This will help differentiate them from other apple varieties and attract customers. This could involve developing a logo, packaging, and promotional materials that highlight the unique characteristics of Kashmiri apples, such as their flavor, texture, and nutritional benefits.

- **Target the right markets:** Identify the most profitable markets for Kashmiri apples, based on factors such as demand, pricing, and competition. Consider targeting high-end retailers and wholesalers who value premium quality products. The profitable markets are Germany, Russian Federation, United Kingdom, Indonesia, Egypt Netherlands etc.

- **Leverage digital marketing:** Use social media platforms, email marketing, and search engine optimization (SEO) to reach potential customers in the target markets. Share high-quality images and videos of the apples to showcase their unique features and appeal.

- **Focus on packaging and labelling:** The packaging and labeling of the apples can play a significant role in attracting customers. Use high-quality packaging materials that protect the apples during transportation and storage. Make sure the labeling is clear, informative, and meets the requirements of the target market.

- **Maintain quality standards:** Quality is essential when exporting products to international markets. Ensure that the apples meet the required quality standards and regulations of the target market. This will help build a

reputation for quality and reliability, which can help attract more customers in the long run.

8. Utilization of Farmer Producer Organization (FPO) in the export of apples

The role of a Farmer Producer Organization (FPO) in the export of apples from Kashmir, particularly from the Shopian district, is significant in enhancing the efficiency and competitiveness of the apple value chain. Here are key aspects of the role of an FPO in facilitating the export of apples:

1. Aggregation of Produce:
    - FPOs aggregate the apple produce from individual farmers in Shopian, consolidating it into larger volumes. This aggregation helps achieve economies of scale, making it feasible for exports to international markets.

2. Quality Standardization:
    - FPOs work towards standardizing the quality of apples produced by farmers. This involves implementing best practices in cultivation, harvesting, and post-harvest management to meet international quality standards.

3. Market Linkages:
    - FPOs establish and strengthen linkages with exporters, traders, and international buyers. By creating direct market connections, FPOs enable a smoother flow of apples from Shopian to global markets.

4. Value Addition:
    - FPOs may engage in value addition activities such as sorting, grading, and packaging to enhance the market value of the apples. Value-added products, such as packaged and processed apples, are often more appealing to international buyers.

5. Compliance with International Standards:
    - FPOs assist farmers in complying with international standards and certifications required for exporting apples. This includes adherence to phytosanitary regulations, quality control measures, and obtaining necessary certifications.

6. Access to Export Markets:
    - FPOs play a crucial role in accessing and exploring new export markets for Kashmiri apples. They actively participate in trade promotions, industry events, and engage with export agencies to identify market opportunities.

7. Financial Support and Subsidies:
    - FPOs facilitate access to financial resources, credit facilities, and government subsidies that support apple growers in adopting modern agricultural practices and meeting export requirements.

8. Training and Capacity Building:
    - FPOs provide training and capacity-building programs to apple growers, educating them about export regulations, quality standards, and post-harvest management practices. This enhances the skills and knowledge of farmers involved in export-oriented agriculture.

9. Marketing schemes to leverage Exports of apples:

Marketing schemes that can be used to leverage the exports of apples from Jammu and Kashmir.

- **Market Access Initiative (MAI):** MAI is a scheme aimed at enhancing India's export competitiveness by supporting market access initiatives for export promotion. Under this scheme, financial assistance is provided to exporters to participate in international trade fairs, buyer-seller meets, and other promotional events. The Jammu and Kashmir government can utilize this scheme to promote the export of apples from the region by participating in international trade fairs and showcasing the quality of their apples to potential buyers.

- **Export Promotion Capital Goods (EPCG) Scheme:** This scheme allows for the import of capital goods for export production at zero customs duty. The Jammu and Kashmir government can encourage apple exporters to utilize this scheme to import machinery and equipment for their apple orchards and processing units, thereby improving the quality of their produce and increasing their export potential.

- **Agriculture Export Policy:** The government's Agriculture Export Policy aims to double the country's agricultural exports. The Jammu and Kashmir government can align its apple export strategy with this policy and take advantage of the various incentives and benefits provided under the policy,

such as financial assistance for infrastructure development, research and development, and market promotion.

- **National Agricultural Market (eNAM):** eNAM is an online platform that provides a single window service for all agricultural commodities, including fruits and vegetables. The Jammu and Kashmir government can encourage apple growers to sell their produce through this platform, which will increase their visibility to buyers across the country and potentially lead to increased exports.

10. Crop insurance for apples:

Crop insurance availability and specific insurance schemes can vary from year to year and may depend on government policies and partnerships with insurance companies. In India, crop insurance for apple growers in District Shopian, as well as other parts of Jammu and Kashmir, is typically offered through government-backed insurance programs. The main crop insurance schemes in India include:

- **Pradhan Mantri Fasal Bima Yojana (PMFBY):** PMFBY is a flagship crop insurance scheme in India. It provides financial support to farmers, including apple growers, in case of crop loss due to natural calamities, pests, or diseases. The scheme is administered by the Ministry of Agriculture and Farmers Welfare and is implemented in partnership with insurance companies. Apple growers in District Shopian may be eligible to participate in this scheme, subject to the scheme's coverage and eligibility criteria.

- **Weather-Based Crop Insurance Scheme (WBCIS):** WBCIS is designed to protect farmers against adverse weather conditions. While it may not cover all aspects of apple cultivation, it can provide compensation for losses resulting from specific weather events, such as hailstorms, frost, and excessive rainfall.

It's important to stay informed about any updates or changes in crop insurance schemes in your area, as government policies and schemes can evolve over time. Engaging with local agricultural officials and insurance companies can help apple growers in Shopian make informed decisions about crop insurance and secure their orchards against potential risks.

11. Anti- hail Net Technique :

Shopian is renowned for its apple production, but it is not immune to the unpredictable and destructive forces of nature, such as hailstorms. In recent years, the adoption of anti-hail net technology has emerged as a game-changer in safeguarding our apple crops and ensuring a bountiful harvest.
Anti-hail nets are specially designed nets made from high-quality materials that are suspended over apple orchards. These nets serve as a protective barrier against hailstones, which can cause substantial damage to apple trees and fruit. The technology works by reducing the impact of hailstones, preventing injury to the trees and minimizing fruit damage.

Benefits of Anti-Hail Nets in Apple Cultivation:

- Hail Protection: The primary advantage of anti-hail nets is their ability to shield apple trees and fruit from the damaging effects of hailstorms. Hailstones can lead to bruising, scarring, and even complete loss of fruit. By installing these nets, we can significantly reduce such losses, ensuring a higher yield and better quality apples.
- Reduced Pest Infestations: Anti-hail nets act as a barrier not only to hail but also to various pests and insects. This natural pest control helps reduce the need for chemical pesticides, promoting eco-friendly and sustainable apple cultivation.

- Improved Fruit Quality: With fewer bruises and scars, apples grown under anti-hail nets exhibit a higher overall quality. This leads to better marketability and premium pricing for our produce.

- Extended Growing Seasons: These nets also offer protection against extreme weather conditions, including excessive sun and heavy rainfall. As a result, our orchards can extend their growing seasons, allowing for more flexibility in harvesting times and better crop management.

- Higher Economic Returns: By safeguarding our apple crops and improving their quality, anti-hail nets contribute to increased economic returns for farmers. The investment in this technology pays off through higher profits and reduced crop loss.

- Environmental Benefits: Anti-hail net technology aligns with sustainable agriculture practices. It reduces the need for harmful chemicals, conserves water, and helps maintain the ecological balance in our orchards.

- Long-term Investment: Once installed, anti-hail nets have a long lifespan, providing protection for many years. This makes it a worthwhile long-term investment in the future of apple cultivation in Shopian.

While the initial investment may seem substantial, the long-term benefits far outweigh the costs. As we continue to face the uncertainties of climate change and erratic weather patterns, embracing innovative techniques like anti-hail nets is crucial to sustaining our agricultural heritage and ensuring a prosperous future for our orchards.

12. Action plan for expanding apple market in the target countries:

- **Expo Mart Common Traders Market**: The market should have shops allotted to the producers/manufacturers and vendors which will help them in establishing a direct relation with end users. The mart can also be utilized for promotion and branding of apples/apple derivative products all over the world. The market can also be used a dome for exhibitions, trades and fairs for uplifting and promoting the industry of District
- **E-commerce Collaboration:** An MoU should be signed between e-commerce companies like amazon.com and ebay and the units for onboarding them to the platform. This will help the sellers engage with customers around the world and increase the export of the product which then eventually will increase the demand of the products. These companies will then facilitate in cataloguing, branding, training & handholding on how to use platform for increased sales and also provide free onboarding support to the weavers.

- **Promotion Campaign**: An event management agency should be hired for this and an extensive advertising strategy must be followed to increase awareness. This will include print promotions and advertorials in trade

journals, newspapers, magazines and websites. Such promotions will help increase exposure and visibility

13. Access to finance for apple exporters:

The Potential exporters must be made aware of the options of access to finance and credit

- **Export Credit Guarantee Corporation (ECGC):** ECGC provides credit insurance cover to exporters against non-payment of export bills by the overseas buyers due to commercial or political risks. This scheme helps exporters to reduce the risk of exporting to new or difficult markets.

- **National Export Insurance Account (NEIA):** NEIA provides insurance cover to exporters against payment defaults by overseas buyers due to commercial or political risks. This scheme also provides pre-shipment credit to exporters to finance their working capital requirements.

- **Export Development Fund (EDF):** EDF is a scheme launched by the Government of Jammu and Kashmir to provide financial assistance to exporters for market research, participation in trade fairs and exhibitions, and other export promotion activities.

- **Foreign Currency Non-Resident (FCNR) Account:** This is a foreign currency denominated account maintained by Indian banks that allows exporters to keep their foreign exchange earnings in a designated account. This scheme helps exporters to avoid currency fluctuations and reduces the risk of exchange rate volatility.

- **Export Finance Scheme (EFS):** EFS is a scheme launched by the Reserve Bank of India to provide pre-shipment and post-shipment finance to exporters at a concessional rate of interest. This scheme helps exporters to meet their working capital requirements and manage their cash flows effectively.

The Govt. should take measures to control the spurious fungicides/pesticides prevalent in the market and should open small research centers at district level so that proper care can be taken of premature leaf fall and infestation of red spider mite by organizing classroom training programs and giving suggestion, guidelines to the apple cultivators so that problems can be tracked.

Proper branding is now becoming very important for selling Agriculture/Horticulture produce. Apples from Kashmir are known as quality and taste, generally, it has been seen that many other states sell their apples after

branding them as Kashmiri apple. There is a need to brand Kashmiri apple in such a manner that the originality of fruit is traced to the Kashmir region. This will help to get better returns and will also avoid the Kashmir brand-name being misused by any other state for selling their produce.

❖ Soft interventions for exports of Apples from Shopian Kashmir

- Conduct capacity building awareness workshops at district level to create consciousness about different schemes that can be leveraged.
- Collaboration with Indian Institute of Packaging (IIP) will help with innovative packaging techniques customized as per the product
- **Sensitization and facilitation in availing Import/ export documents:** Most of the cluster participants are uninformed of the import-export code, which is essential for engaging in international trade even though they are interested in and sensitive to exports. Even though some of them are informed, they have trouble applying. Therefore, a camp should be organised at the district level once every three months to assist those interested in trade in understanding the necessary paperwork for import and export and to help them obtain it

- We can substantially improve the productivity of existing orchards by focusing on a few important issues which are the root cause of lower productivity. Top priority must be pollination management. Sufficient pollination not only increases fruit set but also has a great impact on quality as well.
- Indiscriminate use of chemicals is one of the reasons for the suppressed population of pollinators which once again is due to lack of awareness or some times for want of getting more at any cost without understanding the repercussion. We must have a strong focus on pollination and canopy management. Correcting these two aspects, shall give a boost to both production and quality of produce even in the traditional orchards.
- Department of horticulture and SKUAST have to be in very close coordination to organise training programmes for masses in each horticulture zone in a district. Canopy management (training and pruning) not only enhances quality and production but also reduces cost of cultivation by way of reducing pest pressure and less volume of pesticide spray. This has a direct impact on

farmers income and side by side helps in decreasing the load of agrochemicals in the environment.

- Soil health indeed is a major concern and a big challenge for future agriculture. Indiscriminate use of agrochemicals has destroyed the soil infrastructure both in terms of physical and biological properties. There is an urgent need to sensitise our farming community at the village level to integrated organic and biological sources of nutrient with chemical fertilisers.
- Research needs to be done on the possibility of organic apple production in the valley for which cultural practices and biological sources of pest management are crucial and not at all easy to do. Soil health card scheme can play a vital role in this regard. District Kulgam has done good progress in this regard by organising awareness camps, conducting soil health campaigns and distribution of soil health cards both by line department and KVK in tandem.
- Besides this, farmers must follow all components of crop management as it is observed that they are more inclined to agrochemicals for crop nutrition and pest control and ignore fundamental aspects like orchards sanitation, proper drainage and use of well decomposed organic sources of nutrients like farmyard manure, compost, vermicomposting, Sheep manure etc in recommended proportions based on soil nutrient status.
- Finally, it is the post-harvest management which is going to play a very crucial role in the apple industry. Over the years there has been a reasonably high production of apple in the valley and it is further expected to increase many folds with the introduction of high-density apple farming. To handle such a huge quantity and to manage the lower grades including fallen fruit, we must have a very sound fruit processing units, advanced grading and packing facilities, smart transportation facility and in fact market intelligence services.
- There are some other serious issues especially maintenance of quality standards to compete with other competitors at the global level, import and export policy, the commission agents and exploiters. It is really sad to mention that farmers get a very less share of the price which consumers pay for their produce.

Marketing of Apple

Apple buyers	Percentage
Middle man	12
Direct to consumer	12
Commission agents	76
Total	**100.00**

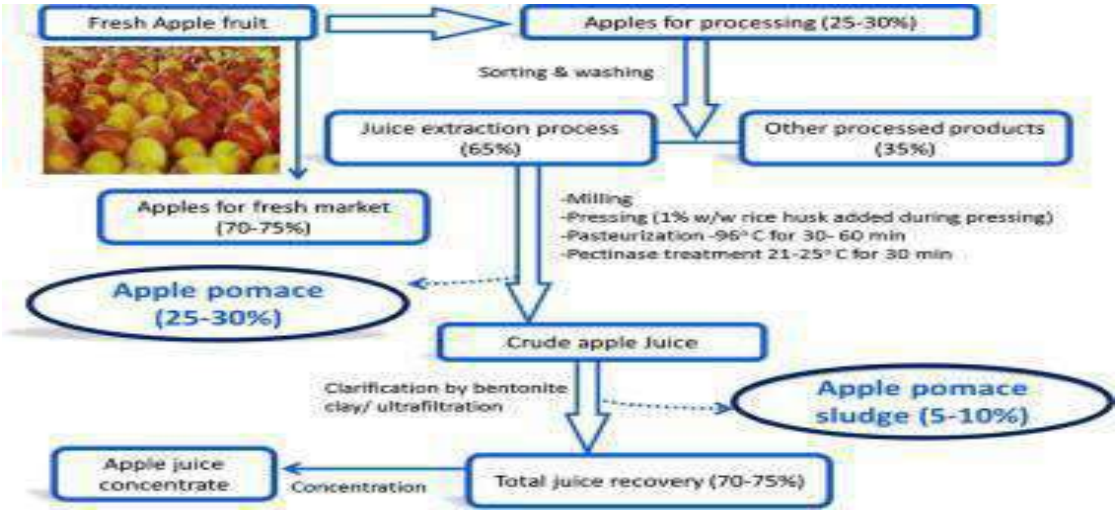
The above table reveals that 76% of farmers sell their produce to commission agents, while 12% and 12% of farmers sell to middlemen and consumers.

So regulating markets is also equally important. Joint or group farming like farmer interest groups, farmer producer companies/organizations, SHGs etc may prove quite helping in the dissemination of technology and reduction of risks at various levels of farming up to marketing.

❖ Scope of Value Addition- Apple derivatives

In the expansive apple juice industry, approximately 75% of apples are directed towards juice production, leaving a 25% by-product known as apple pomace. The disposal of apple pomace, a biodegradable substance with a high biochemical oxygen demand (BOD), into the environment contributes to pollution. Despite its traditional use as cattle feed, only a fraction of apple pomace is effectively utilized due to its susceptibility to rapid spoilage when in a wet state.

In India, the annual production of apple pomace stands at around 1 lakh metric tons, with only about 10,000 metric tons being put to use. Processing plants in Jammu and Kashmir and Himachal Pradesh generate substantial quantities of unused apple pomace, leading to environmental pollution concerns arising from fermentation and a high chemical oxygen demand (COD) ranging from 250 to 300 g/kg.



- **Potential Opportunities that can be Leveraged:**
  Value Addition Opportunities: Apple pomace presents opportunities for conversion into various value-added products, including pectin, Ursolic Acid, growth regulators, and compost.
- **Utilization of Apple Pomace:** Apple pomace typically contains 66.4–78.2% moisture, 9.5–22.0% carbohydrates, and various other components. Leveraging apple pomace from processing industries could lead to the development of products such as:

1. **Pectin**: Pectin, extracted through a multistep process from apple pomace, is widely used in food products and pharmaceuticals. The global pectin market is experiencing growth, with a value of USD 887.67 million in 2020.

2. **Ursolic Acid**:

100mg: INR 5,300
1g: INR 23,700
5g: INR 75,000

Ursolic Acid, found in apple peels, serves various purposes, including cosmetics additives and synthesis of bioactive derivatives.

3. **Fuel Purpose**: Dried apple pomace can be employed as fuel for steam generation in processing plants, contributing significantly to the energy budget.

4. **Growth Regulator**: Apple pomace is utilized as a growth regulator for various crops.

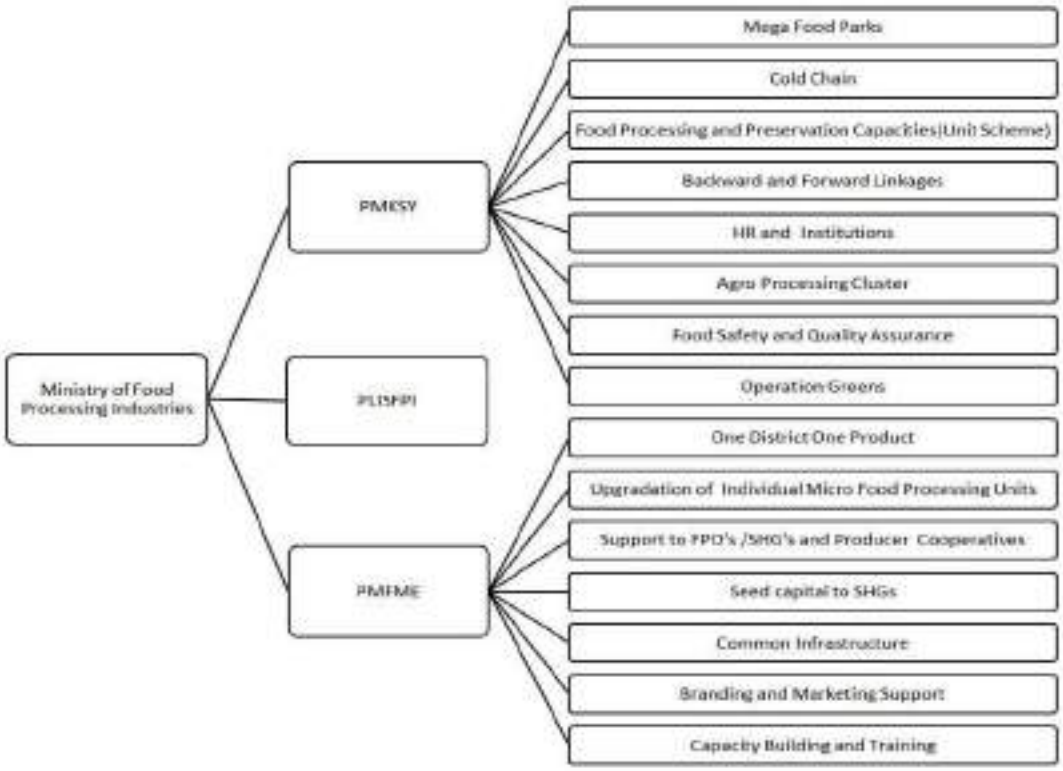
5. **Cattle Feed**: Traditionally used as cattle feed, apple pomace can be safely incorporated into the ration of animals, as determined by certain researchers.

The proposed intervention seeks to capitalize on the untapped potential of apple pomace, not only addressing environmental concerns but also creating economic opportunities through the development of high-demand value-added products.

❖ Schemes for Apple cultivation in J&K

No.	State Scheme Name	Scheme Description
1.	Jammu and Kashmir High Density Apple Plantation Scheme	HDAP Scheme is 100% State Funded formulated to achieve the objectives of enhancing production and productivity and raising the income of the farmers.
2.	Mission for Integrated Development of Horticulture	A Centrally Sponsored Scheme, MIDH has been launched for the holistic development of horticulture in the State from 1-04-2014. It integrates the ongoing schemes of National Horticulture Mission, Horticulture Mission for Northeast & Himalayan States. MIDH aims at the holistic growth of the horticulture sector, covering fruits, vegetables, mushrooms, spices, flowers, aromatic plants, etc.
3.	National Mission on Micro Irrigation (NMMI) Scheme	A Centrally Sponsored Scheme, MIDH has been launched for the holistic development of horticulture in the State from 1-04-2014. It integrates the ongoing schemes of National Horticulture Mission, Horticulture Mission for Northeast & Himalayan States. MIDH aims at the holistic growth of the horticulture sector, covering fruits, vegetables, mushrooms, spices, flowers, aromatic plants, etc.
4.	Recognition of Horticulture Nursery	Availability of true-to-type, quality planting material is crucial for the success of commercial horticulture. This necessitates having a network of Horticulture Nurseries conforming to Model Nursery Standards in terms of infrastructure, quality of seed and planting materials, and adoption of Nursery Management Practices. State Governments ensure the supply of quality planting materials for fruit crops by enacting the Fruit Plant Nursery (Regulation) Act and enforcing its provisions through licensing of horticulture nurseries.

❖ Schemes Under Ministry of Food Processing Industries



- Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters)

The Production Linked Incentive Scheme for Food Processing Industry

PM Formalisation of Micro food processing Enterprises Scheme (PM FME Scheme)

❖ Action plan:

1. Infrastructure

	Activities	Responsibility	Duration
i. ii.	CA storage for almost 3 Lakh MT for apples in coming years Refer vans (Refrigerated Transport) each of carrying capacity of 16 MT	Department of Horticulture J&K.	3-5 years
iii.	Quality Control and Certification Agency	Ministry of Industry & Commerce GOI	1-2 years
iii.	Establish apple cluster CFC to increase exports, promote exporters, provide guidance. **a.** Identification of Land **b.** Identification of body to be in charge **c.** Establishment of SPV/CFC/FPO	Ministry of Agriculture & Farmers Welfare	Govt. of India have approved Apple cluster for Shopian worth Rs 135 Cr under Cluster Development Programme 24 months
iv.	Information centers: Market information centres should be established Which will provide the apple fruit growers day to day information and Vital information on marketing, viz., demand, price, market, export etc	Department of Horticulture J&K, DGFT/FIEO/APEDA	1-2 years

2. Marketing strategies

	Activities	Responsibility	Duration
iv.	Build brand image Define the Brand Identity Logo and Visual Identity Packaging Design Promotional Materials Digital Presence Partnerships and Collaborations.	JKTPO, DIPR, Deptt. Of Horticulture. J&K.	Continuously

iv. v.	Identify the most profitable markets for Kashmiri apples, based on factors such as demand, pricing, and competition. Consider targeting high-end retailers and wholesalers who value premium quality products. Use social media platforms, email marketing, and search engine optimization (SEO) to reach potential customers in the target markets.	JKTPO/Deptt of Horticulture	3 months
vi.	Collaboration with Indian Institute of Packaging (IIP) will help with innovative packaging techniques customized as per the size and weight of apples exported	IIP & NIFT	4-6 months
vii.	Collaboration with e-Commerce portals Amazon, ONDC, Blue Rickshaw etc. to boost the sales of the products in the domestic and International Market.	Deptt of Horticulture &JKTPO	Continuous Initiative

3. Financial Assistance

Activities	Responsibility	Duration
• Credit insurance cover	(ECGC)/Directorate of Horticulture/ Banks/DLEPC	Continuous Initiative
• Insurance cover to exporters against payment defaults	NEIA/ Directorate of Horticulture/ Banks/DLEPC	
• **Export Development Fund (EDF):** EDF is a scheme launched by the Government of Jammu and Kashmir to provide financial assistance to exporters for market research, participation in trade fairs and exhibitions, and other export promotion activities.	Directorate of Horticulture/ Banks/DLEPC	

• **Export Finance Scheme (EFS** is a scheme launched by the Reserve Bank of India to provide pre-shipment and post-shipment finance to exporters at a concessional rate of interest. This scheme helps exporters to meet their working capital requirements and manage their cash flows effectively.	RBI/Directorate of Horticulture/ Banks/DLEPC/JKTPO	
• Providing support and guidance to apple producers to enhance their understanding of the programs offered by the state and central governments, as well as the process to access financial aid.	Deptt of Horticulture J&K./ GMDIC/DLEPC/JKTPO	Continuous Initiative

4. High Density Plantation Programme

Activities	Responsibility	Duration
High Density Plantation programme for apples • Increase in production and productivity. • Bringing non-traditional areas of Jammu Province under apple cultivation. • Creation of smaller hi-tech nurseries at Block/Tehsil Level with participation of private sector	Deptt of Horticulture/Agriculture/MoAFW/FPO	14-28 Months

❖ Proposed interventions with Investment in Shopian

Proposed Intervention Component	Required No. of Units	Cost per Unit (Rs. In Cr.)	Estimated Total Cost (Rs. In Cr.)	Mode of Implementation	Available Schemes / Incentives / Convergence
Encouragement of High- Density Plantations	500 ha	Rs. 8 Lakh / acre	5 (50 % as subsidy)	DOH / FPOs / Farmers	MIDH / NHM
Establishing hi-tech nursery	2	Rs. 0.20 Cr. / 500 sq. mt. of nursery	0.4	Private Sector / FPOs / SAUs	HDP Scheme / MIDH
Establishment of Mobile soil testing	1	0.45	0.45	Private Sector / FPOs	MIDH
Promotion of Apple Growers / FPOs / FPCs / Co-operatives*	5	Rs. 10 Lakhs / FPO	0.5	FPOs / SFAC	EGCGFS (SFAC)
Market Improvement	1	Rs. 1 Crore	1	DAC & FW / SAMB	GOI has announced Rs. 2000 crore under AMIF
Setting up of CA storage with 10 MT Sorting & Grading facility	10	Rs. 10 Cr.	10	Private Sector	PMKSY
Setting up of Sorting & Grading facility	1	Rs. 4 Cr. / 12000 MT per annum	4	Private Sector	PMKSY
Setting up of Processing Facility	4	Rs. 5 Cr. / 1800 MT per annum	20	Private Sector	PMKSY
Upgradation of lab for testing pesticide, chemical and MRL	1	Rs. 4.5 Crores	4.5	Private Sector / PPP	APEDA / MoFPI
Reefer Vans	700 (9-10 MT each)			Private Sector	MIDH / NHB
Total Approximate			**46**		

❖ Envisaged Outcomes

- The export turnover of apples from District Shopian would double, leading to a significant increase.
- Digital literacy will improve enabling apple producers to sell their products on e-commerce platforms.
- Eco-friendly and cost-effective packaging is implemented to meet international standards and boost the demand for apples.
- Employment will get increased by double leading to more cultivations of Apples.
- Apple derivative products will be manufactured, and their production will be significantly high

❖ Conclusions:

The economy of Shopian district primarily relies on agriculture, with apple cultivation being the most favorable due to the region's hilly terrain. Apples are highly profitable compared to other crops and serve as the backbone of the local and state economies. In recent years, both apple production and productivity in Shopian district have witnessed growth. There is potential for further expansion by addressing certain factors, including fruit marketing, irrigation, and the use of improved pesticides and fertilizers. However, there are significant obstacles to apple cultivation in the district.

One major challenge is the impact of poor apple prices on the economic status of growers. During the peak season, the supply of apples increases, leading to lower prices. This problem stems from the lack of storage facilities in the valley, which prompts farmers to sell their produce quickly. To mitigate this issue, it is necessary to establish storage facilities in the state or set up local markets and cooperative societies. These measures would help control exploitation by middlemen and provide better opportunities for growers.

Chapter: Abbreviation

APEDA	**The Agricultural and Processed Food Products Export Development Authority**
API	Active pharmaceuticals ingredients
CAD	Computer-Aided Design
CAM	Computer Aided Manufacturing
CFC	Common Facility Center
CONCOR	Container Corporation of India
CPC	Common Production Center
DGFT	Director General of Foreign Trade
DHO	District Horticulture Officer
DIC	District Industries Center
DIEPC	District Industry and Enterprise Promotion Center
DPR	Detailed Project Report
EPC	Export Promotion Council
EPCG	Export Promotion Capital Goods
FIEO	Federation of India Export Organization
FPO	Farmer Producer Organizations
FTA	Free Trade Agreement
GCC	Gulf Cooperation Council
GI	Geographical Indication
HS	Harmonized System
IC	International Cooperation
IC Engines	Internal Combustion Engines
IEC	Import Export Code
IIP	Indian Institute of Packaging
ISW	Industrial Solid Waste
ITI	Industrial Training Institute
KVK	Krishi Vigyan Kendra
MAS	Market Assistance Scheme
MSE CDP	Micro & Small Enterprises - Cluster Development Programme
MSME	Micro, Small and Medium Enterprises
NHB	National Horticulture Board
NIC Code	National Industrial Classification Code
NIC	National Informatics Center
NID	National Institute of Design
NIFT	National Institute of Fashion Technology
NSDC	National Skill Development Cooperation

ODOP	One District One Product
PM FME	Pradhan Mantri Formalisation of Micro food Processing Enterprises
PMU	Project Monitoring Unit
QCI	Quality Council of India
R&D	Research & Development
RMB	Raw Material Bank
SIDBI	Small Industries Development Bank of India
SPS	Sanitary & Phytosanitary
SPV	Special Purpose Vehicle
SWOT	Strength, Weakness, Opportunities, Threats
TBT	Technical Barriers to Trade
UAE	United Arab Emirates
UK	United Kingdom
JK	Jammu & Kashmir
JKTPO	Jammu & Kashmir Trade Promotion Organization
USA	United States of America

Annexures:1

Mission for Integrated Development of Horticulture

Introduction

A Centrally Sponsored Scheme MIDH has been launched for the holistic development of horticulture in the State from 1-04-2014 which integrates the ongoing schemes of National Horticulture Mission, Horticulture Mission for North East & Himalayan States. Mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of the horticulture sector covering fruits, vegetables, mushrooms, spices, flowers, aromatic plants etc.

Strategy

- Adopt an end-to-end holistic approach covering pre-production, production, post harvest management, processing and marketing to assure appropriate returns to growers/producers;
- Promote R&D technologies for cultivation, production, post-harvest management and processing with special focus on cold chain infrastructure for extending the shelf life of perishables;
- Improve productivity by way of quality through:
    - Diversification, from traditional crops to plantations, orchards, vineyards, flowers, vegetable gardens.
    - Extension of appropriate technology to farmers for high-tech horticulture including protected cultivation and precision farming.
    - Increase of acreage of orchards and plantation crops particularly in states where total area under horticulture is less than 50% of agricultural area.
- Improve post-harvest management, processing for value addition and marketing infrastructure.
- Adopt a coordinated approach and promote partnership, convergence and synergy among R&D, processing and marketing agencies in public as well as private sectors, at the national, regional, state and sub-state levels;
- Promote FPOs and their tie up with Market Aggregators (MAs) and Financial Institutions (FIs) to support and adequate returns to farmers.
- Support capacity-building and Human Resource Development at all levels, including, change in syllabus and curriculum of graduation courses at Colleges, Universities, ITIs, Polytechnics, as appropriate.

Major Components/activities implemented under the scheme in the State of J&K.

1. Research and Development.
2. Production of Planting Material/Plantation infrastructure.
3. Area Expansion
4. Rejuvenation of Old and Senile orchards.
5. Protected cultivation.
6. Promotion of IPM/INM.
7. Organic farming.
8. Horticulture Mechanization.
9. Training.
10. Post-Harvest Management.
11. Marketing infrastructure

Annexures- Schemes

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भारत सरकार

भारत सरकार
कृषि मंत्रालय
कृषि एवं सहकारिता विभाग
Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation

PREFACE

Availability of quality planting material is a prerequisite to the success of horticulture development initiatives. The Working Group on Horticulture and Plantation Crops for the Eleventh Five Year Plan has projected the total requirement of planting materials of fruits, coconut, cashew, black paper, tree spices, areca-nut etc. as 2000 million by the year 2012 at a modest growth rate of 4% per annum. In the segment of fruit crops alone, the projected demand for the planting material would be 7,145,851 by the year 2007-08; which may increase to 8,359,632 by the year 2011-12. Supply of such a huge quantity of disease free, true to type quality planting material is a big challenge and needs to be addressed at the right time.

The Seeds Act and the Nursery Registration Act have been in operation since December 1966. However, as reported by the said Working Group, the Nursery Registration Act is presently in force in respect of horticulture nurseries only in the States of Punjab, Maharashtra, Himachal Pradesh, Uttar Pradesh, Uttrakhand, Jammu and Kashmir, Orissa and Tamil Nadu. Some system of registering/ monitoring exists for horticulture nurseries in the States of Andhra Pradesh, Assam, Bihar, Goa, Haryana, Karnataka, Kerala while there is no horticulture nursery act in the States of Arunachal Pradesh, Chattisgarh, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Rajasthan, Sikkim, Tripura and West Bengal. In the absence of any formal system of quality assurance for horticulture planting material, it is not feasible to put any kind of quality control related restrictions on horticulture nurseries which do not have adequate production-related infrastructure and pedigreed mother plants.

With a view to ensuring availability of genuine and quality planting material until a new regime of registration of horticulture nurseries under the provisions of a new Seeds Act come in force, it is essential to put a system of Recognition of Horticulture Nurseries in place to facilitate, promote and monitor production and trade of quality planting materials of horticulture crops with a special emphasis on perennial fruit crops which are propagated vegetatively.

It is heartening to note that the National Horticulture Board under the Ministry of Agriculture has taken initiative to start a voluntary system of recognition of horticulture Nursery which is a system of graded certification of production system and procedure in respect of a candidate horticulture nursery. It is different from the system of Licensing of Horticulture Nurseries under provisions of an Act or

Administrative Orders and is aimed at establishing a network of quality horticulture nurseries across the country for the purpose of propagation and distribution of quality planting material of horticulture crops. Guidelines for Recognition of Horticulture Nursery have been prepared by the National Horticulture Board in consultation with the Department of Agriculture and Cooperation and the ICAR; which, in turn, not only provide for a procedure of nursery recognition but also aim at capacity building among owners of horticulture nurseries to continuously strive for upgrading the same to attain a higher level of recognition and maintain the quality so as to meet the criterion of regular surveillance too.

I hope that this system of Recognition of horticulture Nursery by the NHB will fill the existing systemic gap in ensuring supply of quality planting material and go a long way establishing a network of quality horticulture nurseries across the country.

(P.K. Mishra)

New Delhi
17th July 2008

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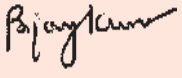
INTRODUCTION

Inadequate availability of quality planting material is one of the important deterring factors in development of sound horticulture industry. It is of special significance especially in perennial horticultural crops which has a long gestation period and effects are known only in later stages. In the existing infrastructure, there are just over 100 big nurseries. A number of Government nurseries also exist in different states. Planting material is also being produced by the ICAR institutes and SAUs, Private nurseries also play important role to meet the requirement of the growers and at present the number of small and medium scale nurseries is over 6300. Presently only 30-40% demand of planting material is being met by the existing infrastructure . Generally, Farmers do not have access to good quality certified disease free planting material of true to type varieties as a result of which production, productivity and quality of the of produce suffers heavily. At present, most of the dependence is on the unregulated private sector nurseries in most of the states which lacks modern infrastructure such as green house, mist chamber, efficient nursery tools and gadgets, implements and machinery.

There are several constraints in the existing system of plant propagation. There are several private nurseries operating in the country playing important role in multiplication of planting material of horticulture crops and many of them follow traditional methods and lack adequate infrastructure and sell plant material of unknown pedigree. Of many other constraints, un-availability of standardized root stocks and non- maintenance of healthy stocks of elite varieties are worth mentioning.

Working group on Horticulture and Plantation crops for the XI Five Year has projected the total requirement of planting material of fruits , coconut, cashew, black pepper, tree spices. areca-nut etc. as 2000 distribution of quality planting material of horticulture crops. Guidelines prepared by National Horticulture Board for Recognition of Horticulture Nursery not only provides information for procedure of recognition but also provide technical information for setting up of fruit plant nursery.

It is hoped that this system will fill up the existing gap and go a long way to establish a network of quality horticulture nurseries across the country.



Bijay Kumar
Managing Director
NHB

Guidelines for Recognition of Horticulture Nursery

1.0 BACKGROUND

Availability of true to type, quality planting material is crucial for success of commercial horticulture. This necessitates having a net-work of Horticulture Nurseries which conform to Model Nursery Standards in terms of Infrastructure, Quality of Seed and Planting Materials and adoption of Nursery Management Practices.

State Governments ensure supply of quality planting materials for fruit crops by enactment of Fruit Plant Nursery (Regulation) Act and enforcement of its provisions through licensing of horticulture nurseries. However, all the States have not enacted Horticulture Nursery Acts. As per the information available in report of the working group on Horticulture for the XI Five Year Plan, at present only 8 states have adopted Nursery Act and in 9 states some system of registration/ monitoring exists for nurseries whereas in 13 states there is no nursery act at present. Status of adoption of Nursery Act is given at Annexure I. Further, rules framed under existing acts generally do not provide for Technical Specification for Quality of Planting Material and Process of Production, Infrastructure required for production of quality planting material and Good Nursery Management Practices. The Acts in present form also do not deal with planting materials of flowers, ornamental plants, plants and vegetables. Therefore, it has become necessary to find a solution to the problem by putting in place a system of Recognition of Horticulture Nurseries.

National Horticulture Mission has taken initiative to specify the Nursery Standards by specifying Infrastructure required for setting up of Model Horticulture Nursery etc. ICAR has recently come out with technical specification of horticulture planting material and its production procedure in a recently published document titled as “Handbook of seed and planting material testing manual for Horticultural crops”. Existing Rules framed under Horticulture Nursery (Regulation) Acts provide for record keeping part for such nurseries. However, each one of them individually does not completely define a Model Horticulture Nursery. Therefore, it is imperative to define a Model Nursery in all the three aspects of Nursery Infrastructure, Production System & Quality Parameters of Planting Material and Good Nursery Management Practices in a comprehensive manner and put a Nursery

Recognition Regime in place. A recognized Model Horticulture Nursery should function as a reliable source of supply of quality planting material for horticulture crops.

With a view to ensure availability of Good Quality planting material as outlined above, NHB has started a system of Recognition of Horticulture Nurseries on voluntary basis.

2.0 SCOPE

2.1 The scope of the scheme is to establish a network of quality nurseries across the country for the purpose of propagation and distribution of quality planting material of specified horticulture crops.

The recognition shall be accorded to the nurseries for:

a) Production of quality planting material of one or more specified crops by adopting Good Nursery management Practices,

b) Nursery Premise only where sale of specified quality planting material of recognized source are being carried out by creating necessary infrastructure facilities and proper record keeping.

Note: If different premises are being used for nursery, recognition of all these are required to be obtained separately and individually.

2.2 The recognition shall be accorded to the nurseries for the crops specified in the Document of recognition

2.3 Recognition shall be granted as such or after up gradation as per requirement.

2.4 Nursery Farms licensed under State Act by Competent Authority shall be given Provisional Recognition for a period of one year under the purview of this scheme but their Final Recognition will be subject to assessment by Technical committee.

2.5 Recognition of Nursery with NHB shall be period specific.

3.0 PROCEDURE FOR NURSERY RECOGNITION AND RENEWAL OF RECOGNITION

3.1 The Nursery seeking NHB Recognition shall apply in Form- I to NHB HQ at Gurgaon. Each such application shall be accompanied by lay out of Nursery showing location of infrastructure components and land utilization plan, details of technically qualified staff in the nursery, major farm machineries and operational manual prepared by nursery for

selection and maintenance of mother plants, process followed for production of planting material and management of inventory of planting material. The Nursery shall submit details regarding source of Mother Plants used for propagation of Horticulture plants in prescribed form (FORM- 1) and shall also maintain a register for sale of horticulture plants.

3.2 The application form duly completed along with necessary enclosures shall be submitted to NHB, Head Office at Gurgaon

3.3 Each application will be considered by NHB based on criteria specified for recognition of nursery.

3.4 The recognition of nursery by NHB shall generally be considered product wise/aspect wise as required.

3.5 On receipt of the application for recognition, assessment would be done by agency identified by NHB with the help of a Technical Committee.

3.6 Agency shall submit its assessment report to NHB along with recommendations.

3.7 On the basis of the assessment report NHB shall decide whether to register the nursery with or without up-gradation.

3.8 The decision of NHB shall be conveyed to the concerned nursery. In case of recognition, the period of validity of recognition with other terms and condition shall be indicated. In case of any deficiency, the nursery shall be given time frame for compliance; failing which, the application shall be rejected. In case of requirement, additional assessment visits may be undertaken.

4.0 CRITERIA FOR NURSERY ASSESSMENT

The criteria have been aligned with Infrastructural requirement of Modal Nursery and Product specific technical requirement and adoption of Good Nursery Practices for propagation of good quality planting material as detailed below:

a) Product specific criteria to asses for capability and competence of nursery follow technical programme for specific crop as laid down in "Handbook of Seed and Planting Material Testing manual for Horticulture crops" prepared by ICAR.

b) Prescribed Nursery Management Practices and Adoption of Model layout plan.

4.1 **Assessment Criteria : A system of Graded Certification:-** It is essentially different from licensing of Horticulture Nurseries under provision of some Act or administrative orders. It is based on continuous evaluation of source of parent material, propagation in disease free condition by adoption of technically prescribed method, adoption of Good Nursery Management Practices, Reliable record keeping and training of staff. Each parameter will be critically examined by assessment team as per laid down criteria. Following grading shall be provided:

Outstanding	-	✹ ✹ ✹ ✹ ✹
Excellent	-	✹ ✹ ✹ ✹
Very Good	-	✹ ✹ ✹
Good	-	✹ ✹
Satisfactory	-	✹

5.0 PROCEDURE FOR APPLICATION TO HIGHER GRADE

5.1 On receipt of an application for recognition, to higher grade from existing lower grade, the application will be considered to register the nursery, for fresh assesment.

5.2 On the basis of the report submitted and the recommendations of the pre assessment of the Committee, the Competent Authority will decide on the need to proceed with processing the case of the nursery for up gradation and subsequent recognition or otherwise.

6.0 RENEWAL OF RECOGNITION

6.1 The Nursery seeking renewal of recognition shall apply in prescribed form.

6.2 The renewal of recognition shall be done based on the satisfactory performance reported as per the surveillance/periodic inspection carried out during the validity period and fresh assessment if felt necessary by NHB.

7.0 PROCESSING FEE

7.1 Processing Fee of Rs. 5,000/- (non-refundable) shall be submitted in the form of demand draft payable to NHB, Gurgaon along with the application for recognition.

7.2 In case of renewal of recognition, processing fee of Rs. 3000/- (Non-refundable) shall submitted in the form of demand draft payable to NHB, Gurgaon along with the application for renewal

7.3 Government/ SAUs/ ICAR nurseries shall be exempted from Processing Fee

8.0 ASSESSMENT AND ASSESSMENT COMMITTEE

8.1 NHB shall nominate one Agency to coordinate the process who will take in to consideration assessment report from a Technical Committee, hereinafter referred to as Assessment Committee which may have Representatives from:

i. State Agriculture University in the State concerned

ii. Apex Horticulture Institute, NRC or Regional Station of ICAR

iii. Nursery Men Association

iv. National Horticulture Board

v. State Directorate of Horticulture/ Agriculture

The members in the Assessment Committee shall be nominated by NHB in consultation with agencies concerned. Assessment Committee shall conduct pre assessment, final assessment and periodic / surveillance of the nurseries. The committee shall submit report and their recommendations to Agency designated by NHB for this purpose.

9.0 VALIDITY PERIOD OF RECOGNITION

9.1 In case of approval, initially, recognition shall be granted for a period of two year.

9.2 The effective date of recognition shall be considered from the date of issuance of certificate.

10.0 SURVILLENCE / MONITORING

10.1 Surveillance visit shall be carried out at least once in a year or as required depending on the performance of the nursery.

10.2 The designated team shall essentially conduct surveillance visit during validity of recognition.

11 ISSUE OF REGOGNITION CERTIFICATE

11.1 In case, Technical Committee satisfies that the Nursery conforms to the requirements of this recognition, it will recommend for recognition of the nursery. The recognition

shall bear an identification number. Recognized Nursery shall have to sign a MOU with NHB for terms & conditions of recognition.

11.2 Any change in the location, layout, design or capacity of the nursery shall be intimated to NHB.

11.3 The date of validity of the nursery recognition shall be specified on the recognition certificate

11.4 The recognition certificate once issued shall continue to be in force till the date specified in the certificate unless suspended or cancelled at earlier date by Competent Authority. The issuing Authority may institute surprise checks through its officers in order to ensure that the nursery has maintained the standard as required for issue of the recognition certificate.

12.0 REFUSAL/CANCELLATION OF NURSERY REGOGNITION

Issue of recognition certificate may be refused or, if issued, may be cancelled or suspended:

i. If the nursery does not conform/fail to perform as per requirements of this scheme

ii. If there are adverse reports from the farmers/users or any other complaints made to NHB by any other entity and upon enquiry duly conducted it is established that the Nursery has breached any of the conditions of recognition,

iii. On expiry of the recognition date specified in the Recognition Certificate the recognition ceases to be valid unless renewed.

13.0 APPEAL AGAINST REFUSAL / CANCELLATION OF RECOGNITION

13.1 Appeal against refusal/cancellation of recognition shall reach to the Managing Director, NHB within 30 days from the receipt of such order.

13.2 In case of cancellation of recognition, the appeal shall accompany the original certificate.

13.3 MD, NHB will consider the application on merit and, in case, found necessary, order re-assessment of the nursery.

14.0 DISCLAIMER

NHB shall host list of recognised nurseries in its website www.nhb.gov.in and promote use of its planting material through schemes implemented by it.

NATIONAL HORTICULTURE BOARD
MINISTRY OF AGRICULTURE, GOVERNMENT OF INDIA
DEPARTMENT OF AGRICULTURE & COOPERATION
85, Institutional Area, Sector - 18, Gurgaon - 122 015 (HARYANA)
Tel.: (0124/95124) - 2341209, 2341239, 2347439-42, 2348313, 2342989-92
Fax: (0124/95124) 2342991, 2341225,
E-mail.: mdnhb@yahoo.com Website : www.nhb.gov.in

Form - I

APPLICATION FORM FOR RECOGNITION OF HORTICULTURE NURSERY

1. Name of the Nursery

2. Constituton: Individual ☐ Partnership ☐ Central/State Govt. SAUs/Organisations under ICAR/CSIR ☐ Co-operative Society, Trust, Company, Otrhers ☐

3. Year of Establishment: ☐☐ ☐☐ ☐☐☐☐

4. Name and Full Address:with Phone/Fax/E-mail

   (a) Owner with Phone/Fax/ E-mail

   (b) Owner of Nursery Land with Phone/Fax/E-mail

5. Location of the nursery
   (a) State
   (b) District
   (c) Town or village
   (d) Nearest Railway Station
   (e) Land Survey No.

6. Total area of the nursery including Mother plants, with survey number:

A. DETAILS OF MOTHER TREES:

A1. Own Mother Plants

Area in Ha.	Crop/Variety	No. of Plants	Source of Planting Material	Age of Plants		Performance Record	
				Year	Month	Yes	No

Note:

- In case of information about source of mother plants is not available, their performance in respect of yield and quality of fruit before being used as mother plant may be given.

A2. Mother Plants are taken Form Other Source

Sr. No.	Crop/ Variety	Source of scion	Address	If source is recognised by NHB, Please give detail thereof	Performance Record	
					Yes	No

A. DETAILS OF MOTHER PLANTS OF ROOT STOCK:

Area in Ha.	Crop/Variety of Root-Stock	Source of Mother Plants	No. of Plants	Age	Performance Record	
					Yes	No

- If root stock plants are not his own, please give particulars of the source from which they will be obtained.

Sl. No.	Veriety	Source of Stock	Address	No. of Plants	Performance Record	
					Yes	No

C. NUMBER OF GRAFTED, BUDDED OR ROOTED CUTTINGS:

Give the details of varieties of each horticultural crop, the applicant wants to produce every year.

Crop	Variety	Method of Propagation	Details of Last two years sales, if any	
			1st Year	2nd Year

7. Future Action Plan for Fruit Plants Production for next three years: -

Crop	Variety	Method of Propagation	No. of plants proposed to be propagated during next three year		
			1st Year	2nd Year	3rd year

8. Details of the facilities for production of disease free planting material

I) Tools & Equipments:-

Sl. No.	Name of the Equipments	Year of Purchase	Number

ii) Plants & Machineries including tunnels, shade-house and Poly-House:-

Type of Infrastructure	Number	Year of Erection	Area/Dimension
Tunnel			
Shade-House			
Poly-House			
Others:- Pl. Specify			

9. Source of Irrigation:-

(a) Ground Water
(b) Surface Water
(c) Micro Irrigation (Drip/Sprinkler)

10. The Sketch plan of the area under nursery and trees showing location of infrastructure components and land utilization

11. Status of implementation of Operation Manual

Flow chart with Time Scale for Production Process	Identification of Input necessary for for each stage of production with specifications	Labeling of each planting material produced	Record Keeping

12. Details of Technically qualified staff in the nursery and their training level

Sl. No.	Name	Qualification	Training under went, if any

13. Trade Relationship with recognized Nursery YES/ NO

14. Particulars of application fee paid by Demand Draft in favour of National Horticulture Board payable at Gurgaon or New Delhi:-

Name of Issuing Bank	Amount	DD. No.	Date

15. DECLARATION:

a) I hereby declare that information given above is true to the best of my knowledge and belief.

b) I have read the rules and undertaken to fulfill all the conditions prescribed in the rules or as amended from time to time.

Signature of the Applicant

Place :

Date:

FOR FURTHER INFORMATION/DETAILS PLEASE CONTACT ANY OF OUR FOLLOWING OFFICES

Location	NHB Field Office		
AHMEDABAD	Tele/Fax	:	079-26766416, 26766413
	E-mail	:	nhbahd@yahoo.co.in
BANGALORE	Tele/Fax	:	080-23371935, 23374149
	E-mail	:	nhbblr@yahoo.com
BHOPAL	Tele/Fax	:	0755-2761741
	E-mail	:	bplnhb@rediffmail.com
BHUBANESHWAR	Tele/Fax	:	0674-2558134
	E-mail	:	nhbbbsr@gmail.com
NAVI MUMBAI	Tel./Fax	:	022-27830107
KOLKATA	Tele/Fax	:	033-23211259, 23377182
	E-mail	:	nhbwb@vsnl.net
CHANDIGARH	Tele/Fax	:	0172-2648073
	E-mail	:	nhb_chd@yahoo.com
NEW DELHI	Tele/Fax	:	011-23073019, 23097015
	E-mail	:	nhbdli@rediffmail.com
GANGTOK	Tele/Fax	:	03592-228453, 220975
	E-mail	:	nhbgangtok@yahoo.com
GUWAHATI	Tele/Fax	:	0361-2595107, 2340695
	E-mail	:	nhbghy_mic@yahoo.co.in
HYDERABAD	Tele/Fax	:	040-23201140
	E-mail	:	nhboard806_hyd@dataone.in
JAIPUR	Tele/Fax	:	0141-2742733, 2740767
	E-mail	:	surendra_tmr@yahoo.com
JALANDHAR	Tele/Fax	:	0181-223048
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	E-mail	:	nhblko@rediffmail.com
CHENNAI	Tele/Fax	:	044-22501151, 22500965
	E-mail	:	nhbtn@dataone.in

NAGPUR	Tele/Fax	:	0712-2513030, 2513110
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	E-mail	:	nhbnashik@yahoo.com
PUNE	Phone	:	020-25530582-83
	E-mail	:	nhbpune@yahoo.com
AGRA	Tele/Fax	:	0562-2331470
KANPUR	Tele/Fax	:	0512-2607631
INDORE	Tele/Fax	:	0731-2701522
RANCHI	Tele/Fax	:	0651-2230132, 2233832
	E-mail	:	nhbranchijh@rediffmail.com
SURAT	Tele/Fax	:	0261-2311343
MADURAI	Tele/Fax	:	0452-2531195
KARNAL	Tele/Fax	:	0184-24295
AMRITSAR	Tele/Fax	:	0183-2500236
ABOHAR	Tele/Fax	:	01634-230822
DEHRADOON	Tele/Fax	:	0135-2761922, 2762767
	E-mail	:	nhb_dehradun@yahoo.com
RAIPUR	Tele/Fax	:	0771-2423992
	E-mail	:	nhbraipur@yahoo.co.in
BAGHPAT	Tele/Fax	:	01234-268685

TABLE - 1 : GRADING CRITERION OF FRUIT

Grade	Loca-tion	Mother Plants			Tech-nology	Infrastructure for Production					Bio-Security and Disease Free Condition			Operation Manual					Staff & Quality		Trade Rela-tions
	Location of Nursery and Area in Ha.	Authentic Source of mother plants	Mother Plants with known pedigree records	Area of Mother Plant	Technology of Propagation	Infrastructure for Disease free growth of planting material	Facility for Hardening	Facility for Fertigation & Media Preparation	Facility for storage	Irrigation Water Sufficiency & Quality	Free from Nutrient Deficiency	Free from Disease Infestation and Facility of biological control	Bio-security Protocol adopted	Flow Chart with Time Scale for the Production Process	Identify the inputs necessary for each stage of production and develop specifications and requirements for each input	Develope procedures to verify that each input meets the specification standsrds	Labeling of each planting material produced	Record Keeping	Staffing Pattern	Training level of Staff	Trading with Recognised nursery only
	Ideal and >5Ha	M	M	M	>8	>8	>8	>8	>8	>8	>8	>8	>8	M	M	M	M	M	M	>8	M
	Ideal and >3Ha< 5Ha	M	M	M	>6 to 8	>6 to 8	>6 to 8	>6 to 8	>6 to 8	>6 to 8	>6 to 8	>6 to 8	>6 to 8	M	M	M	M	M	M	>6, <8	M
	Not Less than 1Ha	M	R	M	5 to 6	5 to 6	5 to 6	5 to 6	5 to 6	5 to 6	5 to 6	5 to 6	5 to 6	M	M	M	M	M	M	>5, <6	M
	R	OS	R	OS	Above 5	Above 5	Abo-ve 5	Above 5	Above 5	Above 5	Above 5	Above 5	Above 5	M	M	R	M	M	R	>5	M
	R	T	R	T	Above 5	Above 5	Abo-ve 5	Above 5	Above 5	Above 5	Above 5	Above 5	Above 5	M	M	R	M	M	R	>5	M

Note** *M= Mandatory*
R= Recommended
OS= Outsourced Material
T = Procuremment by Trading

सत्यमेव जयते

Union Territory of Jammu & Kashmir

DEPARTMENT OF HORTICULTURE

JAMMU

(Schemes of the Department)

DIRECTORATE OF HORTICULTURE

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DEPARTMENT OF HORTICULTURE

JAMMU

LIEUTENANT GOVERNOR
JAMMU & KASHMIR

सत्यमेव जयते

RAJ BHAVAN
SRINAGAR-190001

Manoj Sinha
Lieutenant Governor
Jammu & Kashmir

I am happy to learn that the Directorate of Horticulture, Jammu is coming out with a booklet highlighting all the schemes being successfully implemented by the Department.

Horticulture is one of the priority sectors of J&K due to its unique agro-climatic diversity.

I trust that this publication would provide informative knowledge and educate the farmers about various important facets of Horticulture which will help them improve their socio-economic status.

I gather that the booklet has been prepared in a very simple and lucid language, which is appreciable as it will be easy for its targetted readers to get well-versed with different aspects of the sector covered in the publication.

I congratulate the department and all those who contributed in conceiving this publication and wish them success in their future endeavours.

Manoj Sinha

(Manoj Sinha)

From the desk of Principal Secretary

(Navin K. Choudhary) IAS
Principal Secretary to Govt.,
Horticulture Department

Many initiatives have been taken up in the Horticulture sector to enhance growth prospects of the economy of the Union Territory. The department has brought out this book to bring before the public and to let them know about the schemes in an ease manner.

Special focus is being given to improve the quality and enhance the quantity of production by supporting high-density plantation programme.

This book shows the component wise financial support which the farmers can avail for the establishment of orchard and other components under various schemes of the department thereby opening huge employment opportunities for young men and women of J&K. Besides it also depicts the eligibility criteria and procedure for availing the said assistance.

It is an effort to provide the valuable information about the various Centrally sponsored schemes and CAPEX Budget as well in a lucid way at the door steps of the farming community.

I hope this booklet would ignite adequate interest and response from the common masses especially farmers of the UT of J&K.

(Navin K. Choudhary) IAS
Principal Secretary to Govt.,
Horticulture Department

Foreword

Ram Savak, KAS
Director Horticulture
Jammu

I feel proud and honour to present this book for the convenience of farming community. It is an attempt to present the schemes of the Department in an attractive and pleasant format so that farmers can understand easily and capitalize on in improving their livelihood besides achieving sustained development and economic growth.

The Horticulture sector plays an important role in J&K and contributes significantly to the Economy of Union Territory. Horticulture development is one of the thrust area and a number of programmes are being implemented.

Realizing the importance of agrarian economy in general and my keen interest for providing the services of the Department at the doorsteps of the farmers, I Present this booklet for the public of Jammu Division. I hope this publication shall definitely prove beneficial for the farming community.

To make the farming community aware about the various programmes, the Department will strive to keep its close coordination with the masses with relevant publications in future as well.

Ram Savak, KAS
Director Horticulture
Jammu

Mission for Integrated Development of Horticulture (MIDH)

Mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of Horticulture Sector which facilitates Infrastructure Development, Area Expansion, Protected Cultivation, Horticulture Mechanization, Irrigation Facilities, Capacity Building, Organic Farming, Functional Pack House, etc.

S.No.	Activity/Components	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
A.	**PLANTATION INFRASTRUCTURE DEVELOPMENT**		Any person can apply to concerned CHO along with revenue record of his land with recommendation(s) from PRI
A.1	**Production of Planting Material**		
a)	Small Nursery (**Private Sector)**	**7.50 lac per Hectare**	
b)	Upgrading Nursery infrastructure to meet up accreditation norms (**Private Sector)**	**1.25 lac per Hectare**	
A.2	**Establishment of new Orchards** (Area Expansion-for a maximum area of 4 ha per beneficiary)		
a).	**Normal Spacing Fruit Plantation**		
i)	**Incentives for First Year** (Without Integration)	**0.180 lac per Hectare**	Any person can apply to concerned CHO /HDO who has his own Orchard with recommendation (s) from PRI
ii)	**Incentives for second Year**	**0.060 lac per Hectare**	The Incentive is provided to the Orchardist who has 75% of the survival of Fruit plants in his orchard. The farmers shall apply to concerned CHO /HDO for assistance.
iii)	**Incentives for third Year**	**0.060 lac per Hectare**	The Incentive is provided to the Orchardist who has 90% of the survival of fruit plants in his orchard. The farmers shall apply to concerned CHO /HDO .
A.3	**Rejuvenation/Replacement of Senile Plantation/Canopy Management** (Maximum limit to 2 ha per beneficiary)	**0.20 lac Per Hectare**	Any person can apply to concerned CHO /HDO having old orchard in declining stage with recommendation (s) from PRI

Protected Cultivation

(Polygreen house) **(Shade Net house)**

In Protected cultivation, Productivity of the fruit crops is increased considerably per unit area. Off-season vegetables can be grown round the year. Effective control of pests and diseases is possible. Protection against wind and other unfavourable weather conditions.

S.No.	Activity/Components	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
A.4	**Creation of Water Sources**		
a)	Water harvesting system for individuals for storage of water in 20m x 20m x 3m Pond (pro - rata basis) / Tube well/Dug well	**0.90 lac Per Pond/ Tube well/ Dug well**	Any person can apply to concerned CHO /HDO who has his own Orchard with recommendation(s) from PRI
b)	Community Tanks/ Pond/on farm Water Reservoirs with use of Plastic/RCC Lining with size of 100m X 100m X 03m to irrigate 10 ha of command area or any other smaller size on pro- rata basis	**25.00 lac per community tank or on pro-rata basis**	A group of Orchardists residing in the same village/ area for providing irrigation to their fruit plants can apply to concerned CHO with recommendation(s) from PRI
A.5	**Protected Cultivation**		Any person can apply to concerned CHO/HDO who has his own Orchard with recommendation(s) from PRI
A.5.1.	**Naturally Ventilated System**		
a)	Tubular Structure (50% cost for a maximum area of 4000 sq m per beneficiary)	**0.006095 lac per Sq. m**	
b)	Wooden Structure (50% cost of each unit not exceeded to 200 sq m per beneficiary)	**0.003105 lac per Sq. m**	
c)	Bamboo Structure (50% cost of each unit not exceeded to 200 sq m per beneficiary)	**0.002590 lac per Sq. m**	
A.5.2.	**Shade Net House**		
a)	Tubular Structure (50% cost for a maximum area 4000 sq m per beneficiary)	**0.00408 lac per Sq. m**	
b)	Anti Bird/Anti hail nets (50% of the total cost limited to 5000 Sq m per beneficiary)	**0.000175 lac per Sq. m**	
c)	Plastic Mulching (50% of the total cost limited to 2 Ha per beneficiary)	**0.184 lac Per ha**	
A.6	**Organic Farming**		
a)	Vermi Compost Unit of size 30' x 8' x 2.5'	**0.50 lac per unit**	
b)	Vermi Bed (HDPE) to the size of 12' x 4' x 2'	**0.08 lac per unit**	
A.7	**Pollination support through Beekeeping**		
a)	Honey bee colony (40% of cost limited to 50 colonies per beneficiary)	**0.008 lac per colony**	
b)	Bee Hives (40% of cost limited to 50 colonies per beneficiary)	**0.008 lac per colony**	

Functioal Pack House

A pack house can be used for temporarily storing, cleaning, grading and packing of the horticulture produce prior to distribution to the market.

S.No.	Activity/Components	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
A.8	**Horticulture Mechanization**		Any person can apply to concerned CHO /HDO who has his own Orchard with recommendation(s) from PRI
a)	Tractor upto 20 PTO HP	**35% of cost or maximum of 1.00 lac per unit**	
b)	Power tiller below 8 BHP	**maximum of 0.50 lac per unit**	
c)	Power Tiller 8 BHP & above	**maximum of 0.75 lac per unit**	
A.9	**Human Resource Development**		
A.9.1	**Training of Farmers**		
a)	Within State (Rs. 1000 per day per farmer including transport)	**100% of the cost**	
b)	Outside State (Project based as per actual)	**100% of the cost**	
A.9.2	**Exposure visit of farmers**		
a)	Outside State (Project based as per actual).	**100% of the cost**	
A.10	**INTEGRATED POST HARVEST MANAGEMENT**		
a)	Pack House with size of 9m x 6m x 3m	**50% of the cost or maximum of 2.00 lac per unit**	Any person can apply to concerned CHO/HDO who has his own Orchard in bearing stage with recommendation(s) from PRI
b)	Preservation Unit (Low Cost)	**50% of the cost or maximum of 1.00 lac per unit**	Any interested person who has either attained any skill from a recognized institute or has his own interest in food preservation, food processing and canning can apply to Chief Canning Instructor, Jammu, or concerned Manager-Cum-Chemist/ CHO/HDO with recommendation(s) from PRI
c)	Primary/Mobile/Minimal processing unit	**55% of the cost or maximum of 13.75 lac per unit**	

Strawberry Cultivation Under Capex

Capex Budget

Union Territory of Jammu and Kashmir Sponsored Scheme

S.No.	Name of the Scheme/work	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
1.	**Incentive for Horticulture Activities**		Any person can apply to concerned CHO /HDO along with the revenue record of his land with recommendation (s) from PRI
a	Area Expansion Programme - High Density Plantation	Rs. 0.50 lac/H	
b	Promotion of Strawberry Cultivation	Rs. 0.13 lac/Kanal	
c	Promotion of ***Aloe-vera*** Cultivation	Rs. 0.75 lac/Ha	
2.	Promotion of Backyard Horticulture (Urban/Rural)	Rs. 0.0018 lac per kit of three plants per Household	

Organic Farming

Vermi compost Unit

Vermibed

Vermi compost is an eco-friendly bio fertilizer which is rich source of nutrient, vitamins, enzymes, antibiotics and growth hormones, so it gives disease resistance to plants. Its nutrient content is higher than traditional compost. Vermi compost harbors certain microbial populations that help in nitrogen fixation and Phosphorous solubilization.

Prime Minister Developmental Package(PMDP)

Pradhan Mantri Development Package (PMDP) is a special package announced by the Hon'ble Prime Minister The activities undertaken under PMDP have been formulated for the development Horticulture Sector as per MIDH scheme.

S.No.	Activity/Components	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
1.	**Special Intervention**		Any person can apply to concerned CHO who has his own land (minimum 3 Kanal) along with the revenue record with recommendation(s) from PRI
i)	Ultra High Density Plantation	19.95 lac per Ha	
ii)	Demonstration Plots (Strawberry)	0.04 lac per Ha	
2.	**Protected Cultivation**		Any person can apply to concerned CHO / HDO along with the revenue record of the land with recommendation(s) from PRI
i)	Tubular Structure	0.006095 lac per Sq. m	
ii)	Wooden Structure	0.00259 lac per Sq. m	
3.	**Horticulture Mechanization**		Any Orchardist can apply to concerned CHO / HDO along with the revenue record with recommendation(s) from PRI
i)	Tractor upto 20 PTO HP	35% of cost or maximum of 1.00 lac per unit	
ii)	Power tiller below 8 BHP	50% of the cost or maximum of 0.50 lac per unit	
iii)	Power Tiller (8 BHP and above)	Maximum of 0.75 lac per unit	
4.	**Creation of Water Sources**		
i)	Individual Tubwell / Borewell / Water harvesting system for storage of water	Maximum of 0.90 lac per unit	
ii)	Individual Tubwell / Borewell / Water harvesting system with Tank for storage of water	Maximum of 1.80 lac per unit	
5.	**ORGANIC FARMING**		
i)	Vermi Compost (30m x 8m x 2.5m)	50% of the cost or 0.50 lac per unit	
6.	**Integrated Post Harvest Management**		
i)	Pack House (9m x 6m x 3m)	50% of the cost or 2.00 lac per unit	Any person who has orchard in his land in bearing condition can apply to concerned CHO / HDO with recommendation(s) from PRI

Deep Bore well

Micro-irrigation (Sprinkler irrigation) PMKSY

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)

A). "Per Drop More Crop" (PDMC) - Micro Irrigation

PMKSY (Micro Irrigation) includes Creation of new water sources through Minor Irrigation (both surface and ground water), Repair; restoration and renovation of water bodies; Strengthening carrying capacity of traditional water sources; Construction of rain water harvesting structures (Jal Sanchay); Command Area Development, strengthening and creation of distribution network from source to the farm; Ground water development, etc.

S.No.	Technology	Spacing/Specification (with Indicative cost)	Assistance to the beneficiaries @ 55% of the Indicative cost	Eligibility Criteria & Procedure for applying to avail the Assistance
1.	**Drip Irrigation system (Wide Spaced Crops)**	10m x10m (Rs 0.2892 lac / Unit cost /1 Ha)	0.15906 lac per Ha	Any orchardist having irrigation source can apply to concerned CHO /HDO with recommendation(s) from PRI
		8m x 8m (Rs 0.31809 lac / Unit cost /1 Ha)	0.17495 lac per Ha	
		6m x 6m (Rs 0.4036 lac / Unit cost /1 Ha)	0.22198 lac per Ha	
		6m x 6m (Rs 0.2431 lac / Unit cost /0.4Ha)	0.13371lac per 0.4 Ha	
		4m x 4m (Rs 0.47365 lac / Unit Cost/ 1 Ha)	0.26051 lac per Ha	
		4m x 4m (Rs 0.27076 lac/ Unit Cost /0.4 Ha)	0.14892 lac per 0.4 Ha	
		2m x 2m (Rs 0.94259 lac/Unit Cost /1 Ha)	0.51842 lac per Ha	
2.	**Drip Irrigation system (close Spaced Crops)**	1.5m x 1.5m @ 1.08205 lac per ha	0.59513 lac per ha	
		1.2m x 0.6m @ 1.58489 lac per ha	0.87169 lac per ha	
3.	**Portable Sprinkler irrigation system**	75 mm @ 0.27376 lac per ha	0.15057 lac per ha	
4.	**Micro sprinkler irrigation system**	3m x 3m @ 0.84026 lac per ha	0.46214 lac per ha	
5.	**Mini sprinkler irrigation system**	8m x 8m @ 1.17535 lac per ha	0.64644 lac per ha	
6.	**Semi Permanent sprinkler irrigation system**	@ 0.45750 lac per ha	0.25163 lac per ha	

S.No.	Technology	Spacing/ Specification (with Indicative cost)	Assistance to the beneficiaries @ 55% of the Indicative cost	Eligibility Criteria & Procedure for applying to avail the Assistance
7.	**Large volume sprinkler irrigation system (Rain Gun)**	75mm @ 0.43141 lac per ha	0.23728 lac per ha	Any progressive farmer/orchardist can apply to concerned CHO /HDO with recommendation(s) from PRI
8.	**Training of Stake Holders**	Within the State (100 % of the cost including Transportation charges.)	0.01000 lac per participant per day	
		Outside the State 100 % of the cost (Project Based as per actual.)	0.01250 lac per participant per day	
9.	**Exposure Visits of Stake Holders**	Outside the State 100 % of the cost (Project Based as per actual.)	0.00800 lac per participant per day	
		Outside the India Rs 4.00 lac per participant plus TA/DA as admissible (100% of air/rail travel. Course fee to be funded under mission)	4.0 lac per participant	

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)

B). Other Interventions under "Per Drop More Crop" (PDMC)

Construction of micro irrigation structures to supplement source creation activities including tube wells and dug wells (in areas where ground water is available and not under semi critical /critical /over exploited category of development).

S.No.	Interventions	Rate of Assistance	Eligibility Criteria &Procedure for Applying to avail the Assistance
1.	Improved/innovative distribution system like pipe and box outlet system with controlled outlet and other activities of enhancing water use efficiency	50% of the cost (Water carrying pipes) limited to Rs 50/- per meter for laminated HDPE pipe and for others Rs 25/- per meter with maximum ceiling of Rs. 0.15 lac per beneficiary maximum length of pipe 600 meter per beneficiary.	Any person can apply to concerned CHO /HDO who has his own Orchard with recommendation(s) from PRI
		50% of the cost (Pipe/Pre cost of distribution system)system limited to Rs 0.10 lac per Ha with assistance up to a maximum of 4 ha per beneficiary or Group	
2.	Water lifting Devices	50 % of the cost (Pump set) subject to maximum Rs 0.10 lac per unit	
		50 % of the cost (Diesel/electric pump set units) subject to maximum Rs 0.15 lac per unit	
		50 % of the cost (Solar/wind unit) subject to maximum Rs 0.50 lac per unit	
3.	Secondary storage structures at tail end of canal system to store water when available in abundance (rainy season) or from perennial sources like streams for use during dry periods through effective on-farm water management.	100% of cost (Plastic/RCC based water harvesting structures/ farm pond/community tank of size (100m×100m×3m)) limited to Rs 20.00 lac for plain areas and Rs 25 lac per unit for Hilly areas for 10 Ha of command area or any other smaller size on pro rata basis depending upon command area.	A group of orchardists residing in the same village/area for providing irrigation to their fruit plants can apply to concerned CHO with recommendation(s) from PRI

S.No.	Interventions	Rate of Assistance	Eligibility Criteria &Procedure for Applying to avail the Assistance
4.	Construction of micro irrigation structures to supplement source creation activities including shallow/medium tube wells and dug wells (in areas where ground water is available and not under semi critical /critical /over expl-oited category of development)	50% of cost (Shallow/medium Bore wells) limited to Rs 0.25 lac per unit	Any person can apply to concerned CHO /HDO who has his own Orchard with recommendation(s) from PRI
5.	Restoring the potential of traditional water storage systems like Khuls/Ponds through disiltation and deepening activities	50% of the cost (Desilting and deepening of Khuls/ponds) of renovation limited to Rs. 0.15 lac per unit	
6.	Water Harvesting structures such as Check dams, Nala bund, Farm ponds, Tanks etc	50% of the cost (Construction cost Rs. 0.00125 lac per cubic metre for Plain and Rs. 0.0015 lac per Cubic metre for Hilly Hilly Areas) limited to Rs 0.75 lac for Plain areas and Rs 0.90 lac in Hilly areas including Lining on pro rata basis (cost for non lined tanks 30% less)	
		Rs 1.50 Lac (Water storage in farm pond/Dug well (20m× 20m× 3m)) per beneficiary for plane areas and Rs 1.80 lac per beneficiary for hilly areas with 300 micron plastic lining/RCC lining for 2 Ha Command area, for smaller size ponds/dug well cost will be pro- rata basis	
		50% of the cost (Construction of Brick Massonary concrete secondary Structure with protective space) Limited to Rs 0.0035 lac per cum of Storage Capacity. Maximum permissible assistance will be Rs 2.00 lac per beneficiary.	
7	Water Harvesting and Management	50 % of the cost (Lining of tanks/Ponds constructed) of plastic/ RCC Lining limited to Rs 0.25 lac per Pond/Tank	

Rashtriya Krishi Vikas Yojna (RKVY)

Rashtriya Krishi Vikas Yojana (RKVY) is a special additional central sponsored scheme with main objective to increase the public investment in the agriculture and allied sectors. The main components of the scheme are top working, cultivation of nut fruits, urban nutritional programme, PP Machinery, etc.

S.No.	Activity/Components	Eligibility Criteria & Procedure for applying to avail the Assistance
1	Cultivation of Nut Fruits -Walnut	Any person can apply to concerned CHO / HDO along with the revenue record of his land with recommendation(s) from PRI
2	Nutritional Programme for Urban areas/ Semi Urban Areas and promotion of Rare and Minor Fruits	
3	Top Working of Wild and Inferior Plants with improved varieties.	Any person can apply to concerned CHO / HDO who has wild/Inferior plants in his land with recommendation(s) from PRI
4	Plant Protection Machinery.	Any Progressive farmer can apply to concerned CHO / HDO with recommendation(s) from PRI
5	Assistance for Post Harvest & Food Processing Machinery.	Any person, self help group or other who is interested can apply to concerned CHO / HDO with recommendation(s) from PRI
6	Creation of Irrigation sources on pro-rata basis	

Agriculture Technology Management Agency (ATMA)

Sub-Mission on Agriculture Extension (SMAE)

Sub-Mission on Agricultural Extension (SMAE-ATMA) will focus on awareness creation and enhanced use of appropriate technologies in agriculture & allied sectors. Use of interactive and innovative methods of information dissemination like low cost films, hand held devices, mobile based services, Kissan Call Centres (KCCs) etc. will be used and convergence brought among extension efforts under different programmes and schemes at village level through the institution of ATMA.

S.No.	Activity/Components	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
A.	**Training of Farmers**		Any Progressive Orchardist can apply to concerned CHO /HDO with recommendation(s) from PRI
i)	Training of Farmers for 7 days outside the state / UT	Rs. 1250/- per day/per farmer	
ii)	With in state for 5 days for 10 farmers	Rs. 1000/- per day/person	
iii)	With in District training programme for 1 day for 25 farmers	Rs. 250/- per day /per farmer	
B.	**Allied Sector**	Rs. 4000/- (Demonstration Plots)	
C.	**Exposure visit of Farmers**		
i)	Out side state / UT (7 days + Journey Time)	Rs. 1000/- per day per farmer	
ii)	within state / UT (5 days + Journey Time)	Rs. 500/- per day per farmer	
iii)	within district (3 days + Journey Time)	Rs. 300/- per day per farmer	

National Food Security Mission - Tree Borne Oilseeds (NFSM-TBOs)

National Food Security Mission- Tree Borne Oilseeds (NFSM-TBOs) focus on low productivity and high potential districts including cultivation of food grain crops in rain fed areas along with Implementation of cropping system centric interventions in a Mission mode approach through active engagement of all the stakeholders at various levels, Agro-climatic zone wise planning and cluster approach for crop productivity enhancement etc.

S.No.	Interventions	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
A)	**Area Expansion**		Any person can apply to concerned CHO / HDO along with the revenue record of the land with recommendation(s) from PRI
A.1)	Integrated Development of Nurseries and Plantation		
a)	Wild Apricot	Rs.16000/Ha	
b)	Olive	Rs. 48000/Ha	
B)	**Production Inputs**		Any interested farmer having Orchard or wish to cover his land under Horticulture can apply to concerned CHO / HDO with recommendation(s) from PRI
a)	Incentive for undertaking intercropping	Rs. 1000/Ha (Oilseeds-Pulses and other crops)	
C)	**Transfer of Technology**		
a)	Farmers Training (Batch of 30 farmers)	Rs. 24000/Training for 2 days @Rs. 400/day per farmer	
b)	Exposure Visit of /officers Extension worker training (input Dealers/Included) (Batch of 20 farmers)	Rs. 36000/ Training for a batch of 20th officers for 2 days @ Rs. 900/ participant per day	

Horticulture Mechanization

Power Tiller

Power Tiller is a multi purpose hand tractor designed primarily for rotary tilling and other Horticultural Operations in the orchard particularly in hilly-terrain.

Tractor

Tractors are typically designed with powerful engines to run over rough terrain and full extremely heavy loads making them effective in tough farming or land scape tasks

"Sub-Mission on Agricultural Mechanization (SMAM)"

Sub-Mission on Agricultural Mechanization will focus on farm mechanization. The Sub-Mission will mainly cater to the needs of the small and marginal farmers through institutional arrangements such as custom hiring, mechanization of selected villages, subsidy for procurement of machines & equipments, etc.

S.No.	Interventions	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail theAssistance
Financial assistance for procurement of Horticulture Machinery and equipment			
1.	**Tractor 40-70 PTO HP**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 5.00 lac/No	Any person having orchard can apply to concerned CHO / HDO with recommendation(s) from PRI
		40% for other farmers cost limited to Rs. 4.00 lac /No	
2.	**Tractor 20-40 PTO HP**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 3.00 lac/No	
		40% for other farmers cost limited to Rs.2.40 lac /No	
3.	**Tractor 08-20 PTO HP**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 2.25 lac/No	
		40% for other farmers cost limited to Rs.1.80 lac /No	
4.	**Power Tiller (8 BHP and above)**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.85 lac/No	
		40% for other farmers cost limited to Rs. 0.70 lac /No	
5.	**Power Tiller (below 8 BHP)**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.65 lac/No	
		40% for other farmers cost limited to Rs.0.50 lac /No	
6.	**Tractor driven Equipments**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.30 lac/No	
		40% for other farmers cost limited to Rs. 0.25 lac /No	

S.No.	Interventions	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
7.	**Garden Hand Tools**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.012 lac/No	Any person having orchard can apply to concerned CHO /HDO with recommendation (s) from PRI
		40% for other farmers cost limited to Rs. 0.010 lac /No	
8.	**Manual Horticulture Equipments (Aluminum Ladder/Pole/Plucker)**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.15 lac/No	
		40% for other farmers cost limited to Rs. 0.12 lac /No	
Inter-cultivation Equipment			
9.	**Weeder(PTO Operated)**	50% for SC/ST/SF/MF Farmers limited to Rs. 0.75 lac/ No	
		40% for other farmers cost limited to Rs.0.60 lac /No	
10.	**Manual Knap Sack/ Foot /Battery Operated Sprayer.**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.0075 lac /No	
		40% for other farmers cost limited to Rs. 0.006 lac /No	
11.	**Powered Knap Sack Sprayer/ Power Operated Taiwan Sprayer(8-12) litres**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.0311 lac/No	
		40% for other farmers cost limited to Rs.0.025 lac /No	
12.	**Powered Knap Sack Sprayer/ Power Operated Taiwan Sprayer above 16 litres.**	50% for SC, ST, Small & Marginal Farmers limited to Rs.0.05 lac /No	
		40% for other farmers cost limited to Rs.0.04 lac /No	
13.	**Eco Friendly Light Trap**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.015 lac/No	
		40% for other farmers cost limited to Rs. 0.012 lac /No	

S.No.	Interventions	Rate of Assistance	Eligibility Criteria & Procedure for applying to avail the Assistance
Self propelled /other Power Driven Horticultural Machinery			Any person having orchard can apply to concerned CHO /HDO with recommendation (s) from PRI
14.	**Chain Saw/Wheel barrow/Mango Grader/ Planter**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.75 lac/No	
		40% for other farmers cost limited to Rs. 0.60 lac /No	
Self propelled Horticultural Machinery			
15.	**Power Operated Horticulture Tools for pruning, budding and grafting**	50% for SC, ST, Small & Marginal Farmers limited to Rs. 0.50 lac / No	
		40% for other farmers cost limited to Rs. 0.40 lac /No	
16.	**Establishment of Farm Machinery Banks for Custom Hiring**	40% of the cost limited to Rs. 4.00 lac/No	Any interested person having capacity to invest at least Rs. 10 lac in Custom Hiring Centre can apply to concerned CHO with recommendation (s) from PRI
17.	**Promotion of Farm Mechanization in selected villages**	80% of the cost limited to Rs. 8.00 lac/No	A group of interested person of a village on community base having capacity to invest at least Rs. 10 lac in Custom Hiring Centre can apply to concerned CHO with recommendation (s) from PRI

For further guidance contact concerned Chief Horticulture Officer, Horticulture Development Officer of the concerned area or local field staff of the Department.

Chief Horticulture Officers of Jammu Division can be contacted on the following Telephone Numbers :

Chief Horticulture Officer, Jammu. 0191-2554354

Chief Horticulture Officer, Samba. 01923-246920

Chief Horticulture Officer, Kathua. 01922-234679

Chief Horticulture Officer, Udhampur. 01992-272551

Chief Horticulture Officer, Reasi. 01991-245659

Chief Horticulture Officer, Doda. 01996-233071

Chief Horticulture Officer, Kishtwar. 01995-259801

Chief Horticulture Officer, Ramban. 01998-210944, 9419126508

Chief Horticulture Officer, Rajouri. 01962-263404

Chief Horticulture Officer, Poonch. 01965-220165

Chief Canning & Processing Instructor Chand Nagar, Jammu. 0191-2579072

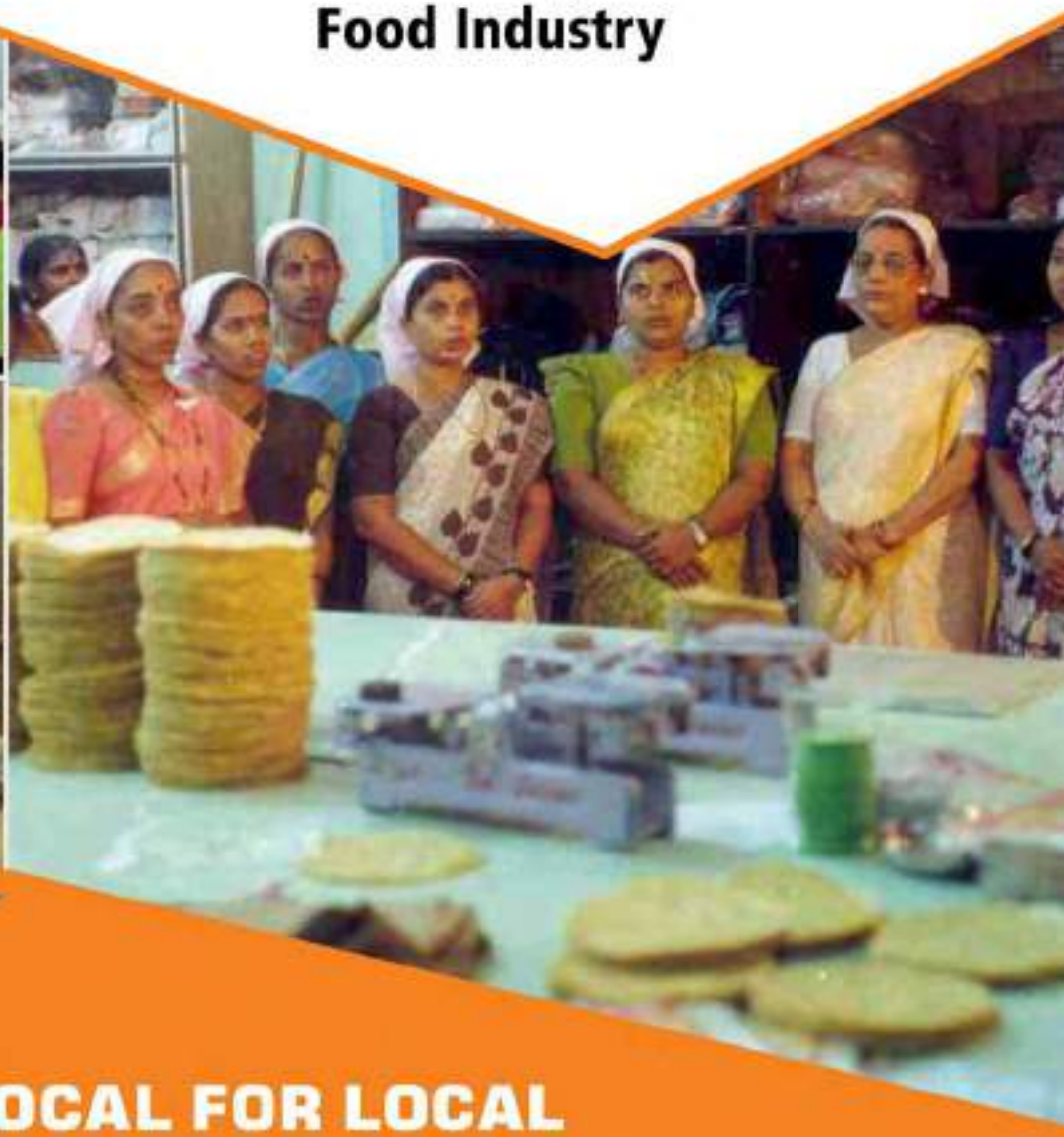
Rohini Printing Industries # 9419187055

MOFPI

स्वच्छ भारत

AATMANIRBHAR BHARAT

Opening gates for growth of Micro Enterprises in Food Industry



VOCAL FOR LOCAL

PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme)

MINISTRY OF FOOD PROCESSING INDUSTRIES
GOVERNMENT OF INDIA

A landmark initiative under Aatmanirbhar Bharat Abhiyan offering golden opportunity for micro food entrepreneurs, FPOs/ SHGs/ Co-operatives to benefit from the ₹10000 crore Scheme for Formalization of 2 lakh Micro Food Processing Enterprises

"A combined resolve of 130 crore citizens is to make India self-reliant. The way ahead lies in LOCAL- Local Manufacturing, Local Markets, Local Supply Chain. Local is not merely a need but a responsibility."

Narendra Modi, Prime Minister

Harsimrat Kaur Badal
Minister of Food Processing Industries

Rameswar Teli
Minister of State, Food Processing Industries

1. Background

1.1 The unorganized food processing sector comprising nearly 25 lakh units contributes to 74% of employment in food processing sector. Nearly 66% of these units are located in rural areas and about 80% of them are family-based enterprises supporting livelihood in rural household and minimizing their migration to urban areas. These units largely fall with in the category of micro enterprises.

1.2 These units face a number of challenges which limit their performance and growth. These challenges include lack of access to modern technology & equipment, training, access to institutional credit, lack of basic awareness on quality control of products, and lack of branding & marketing skills, etc. Therefore, the unorganised food processing sector contributes much less in terms of value addition and output despite its huge potential.

25 Lakh unorganised food processing units contribute to **74%** of employment in food processing sector

2. Objectives

2.1 Taking cognizance of the contribution of the unorganized micro food processing enterprises and the challenges that impede their performance, Ministry of Food Processing Industries (MoFPI) has launched "PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme)" through a package support and services. The objectives under the scheme, inter alia, include:

(i) Capacity building of entrepreneurs through technical knowledge, skill training and hand holding support services;

(ii) Increased access to credit to existing micro food processing entrepreneurs for technology upgradation;

(iii) Support to Farmer Producer Organizations (FPOs), Self Help Groups (SHGs), Producers Cooperatives & Cooperative Societies along their entire value chain to enable microenterprises to avail common services.

(iv) Support for transition of existing enterprises into formal framework for registration under regulatory framework and compliance;

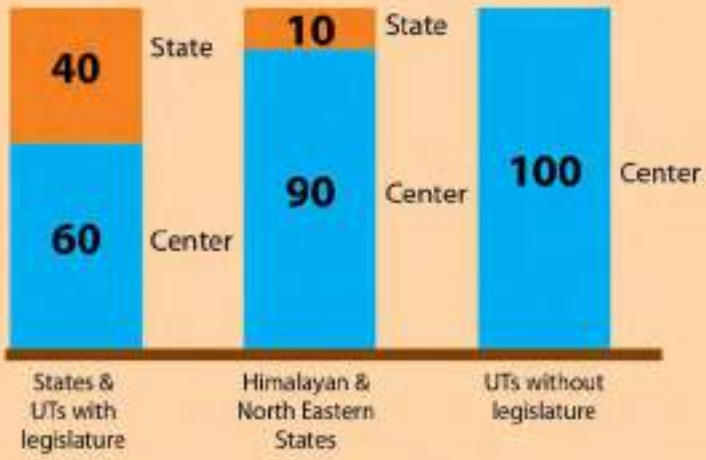
(v) Integration with organized supply chain by strengthening branding & marketing;

3. Coverage of States/ UTs and Funding Pattern

3.1 It is an All India Centrally Sponsored Scheme with an outlay of Rs. 10,000 crore for coverage of 2,00,000 enterprises over 5 years from 2020-21 to 2024-25. The expenditure under the scheme would be shared in 60:40 ratio between Central and State Governments, in 90:10 ratio with North Eastern and Himalayan States, 60:40 ratio with UTs with legislature and 100% by Center for other UTs.

3.2 Expenditure in the first year 2020-21, whether incurred by the Centre or the States would be borne 100% by the Central Government. The expenditure made for the first year would be adjusted in ratio given above in the funds being transferred to the States equally in the next four years.

Fund Sharing Pattern Between Center & State



3.3 Funds under the Scheme would be provided to the States based on the approved Project Implementation Plan (PIP).

4. One District-One Product Approach

4.1 The Scheme will adopt a One District One Product (ODOP) approach to reap benefit of scale in terms of procurement of inputs, availing common services and marketing of products. One District One Product approach would provide framework for value chain development and alignment of support infrastructure. There may be more than one cluster for one product in one district. A cluster may also extend beyond one district. The States would identify food product for a district, keeping in perspective the focus of the scheme on perishables. The ODOP could be a perishable agri-produce, cereal based product or a food product widely produced in a district and their allied sectors. Illustrative list of such products includes mango, potato, litchi, tomato, tapioca, kinnu, bhujia, petha, papad, pickle, millet based products, fisheries, poultry, meat as well as animal feed among others. With respect to support to existing individual micro units, preference would be given to those producing under ODOP approach. However, units producing other products would also be supported. In case of groups, predominately, those involved in products under ODOP approach would be supported. Support to groups processing other products in such districts would only be for those already processing those products and with adequate technical, financial and entrepreneurial strength. Support for common infrastructure and marketing & branding would only be for products under ODOP approach. In case of support for marketing & branding at State or regional level, same product of districts not having that product as ODOP could also be included.

4.2 The scheme would also support strengthening of backward and forward linkages, provision of common facilities, incubation centres, training, R&D, marketing & branding, provision of which would primarily be for ODOP products. Further, this approach would also complement and benefit from the existing promotional efforts of the Government such as development of Agriculture Crop Clusters under the Agriculture Export Policy, the cluster approaches of the Ministry of Agriculture and the Ministry of Rural Development through the National Rurban Mission.

5. Support to Food Processing Units

Support to food processing units would be provided for the following:

(i) Credit linked grant at 35% of the project cost with maximum grant up to Rs 10.0 lakh to existing unorganised food processing units for upgradation;

(ii) Credit linked grant at 35% of the project cost to SHGs/FPOs/cooperatives for capital expenditure with maximum limit as prescribed;

(iii) Seed capital @ Rs. 40,000/- per member to those engaged in food processing as a working capital;

(iv) Credit linked grant at 35% of the project cost for common infrastructure with maximum limit as prescribed;

(v) Support for marketing & branding up to 50% of the expenditure with maximum limit as prescribed.

6. Upgradation of Processing Units

6.1 Individual Category: Individual micro food processing units would be extended credit-linked capital subsidy @35% of the eligible project cost for expansion/ technology upgradation with a maximum ceiling of Rs.10 lakh per unit. The beneficiary contribution should be minimum 10% and the balance should be loan from a Bank.

6.1.1 Eligibility criteria:

(i) Individual / Partnership Firm with ownership right of the enterprise;

(ii) Existing micro food processing units in the survey or verified by the Resource Person;

(iii) The applicant should be above 18 years of age and should possess at least VIII standard pass educational qualification;

(iv) Only one person from one family is eligible for obtaining financial assistance. The "family" for this purpose would include self, spouse and children.

6.1.2 Procedure for applying for upgradation:

6.1.2.1 Applications would be invited at the district level on an ongoing basis for units interested in availing the benefits under the Scheme. Existing food processing units desiring to seek assistance under the scheme should apply on the FME portal. Loan proposals would be recommended to the Banks after scrutiny. States would decide the appropriate level for short listing of the applications to be recommended to the Banks.

6.1.3 Procedure with Banks for Grant:

6.1.3.1 At the national level, a Nodal bank would be appointed for disbursement of subsidy to the banks and liaison with the banks extending loan to the beneficiaries. The bank sanctioning the loan would open a mirror account in the name of the beneficiary. Grant by the Central and State Government in 60:40 ratio would be deposited in this account of beneficiary in the lending bank branch by the State and Central Government. If after a period of three years from the disbursement

of last tranche of the loan, the beneficiary account is still standard and the unit is operational, this amount would be adjusted in the bank account of beneficiary. Release of grant for groups and common infrastructure would also be done in their bank account following the same principle.

6.2 **Group Category:** The Scheme would provide support in clusters to groups such as FPOs/ SHGs/ producer cooperatives along their entire value chain. SHGs / FPOs / Producer Cooperatives would be provided the following support:-

(i) Grant @35% with credit linkage for capital investment with maximum limit as prescribed;

(ii) Training support;

(iii) Support for marketing and branding for products under ODOP for developing common brand.

6.2.1 Eligibility Criteria:

(i) It should be engaged in processing of ODOP produce for at least three years;

(ii) In case of FPOs / cooperatives, they should have minimum turnover of Rs.1 crore and the cost of the project proposed should not be larger than the present turnover;

(iii) The SHG / cooperative / FPO should have sufficient internal resources to meet 10% of the project cost and margin money for working capital.

6.3. Seed Capital to SHG:

The scheme envisages provision of Seed Capital @ Rs. 40,000/- per member of SHG engaged in food processing for working capital and purchase of small tools. Seed capital as grant would be provided at the federation level of SHGs which, in turn, will be extended to members as loan through SHG.

6.3.2 Eligibility criteria:

6.3.2.1 For Seed Capital, only SHG members who are presently engaged in food processing would be eligible. The SHG member has to commit to utilize this amount for working capital as well as purchase of small tools and give a commitment in this regard to the SHG and SHG federation.

7. Creation of Common Infrastructure

7.1 FPOs/ SHGs/ Producer Cooperatives /State agencies or private enterprises would be supported for creation of common infrastructure including for common processing facility, incubation center, laboratory, warehouse, cold storage, etc. Eligibility of a project under this category would be decided based on benefit to farmers and industry at large, viability gap, absence of private investment, criticality to value chain, etc. Credit linked grant would be available @ 35% with maximum limit as prescribed.

8. Branding and Marketing Support

8.1 Marketing and branding support will be provided to FPOs/SHGs/Cooperatives or an SPV of micro food processing enterprises under the scheme following the cluster approach for developing common packaging & branding with provision for quality control, standardization and adhering to food safety parameters for consumer retail sale.

8.2 Support for Marketing and Branding requires a minimum volume which can be generated through active involvement of FPO/ SHG/ Cooperatives to bring large number of producers together. These organisations would be supported based on DPR prepared by them indicating essential details of the project. Support up to Rs.5 lakh would be available from State Nodal Agency for preparing DPR for proposals for branding & marketing.

8.3 Support for branding and marketing would be limited to 50% of the total expenditure with maximum limit as prescribed. Proposal from states or national level institutions or organizations or partner institutions for branding & marketing will be supported for vertical products at the national level. No support would be provided for opening retail outlets under the scheme.

8.4 Procedure for Applying for Support:

8.4.1 In case of SHGs/FPOs/cooperatives or SPV interested in applying for support for branding and marketing under the Scheme, DPR should be prepared and submitted to State Nodal Agency (SNA). SNA would appraise the proposal and with recommendation from the State Level Approval Committee (SLAC) seek approval from MOFPI. Thereafter, the proposal would be recommended to a Bank for sanction of loan. Same procedure should be followed for applying for support for creation of common infrastructure as well.

9. Capacity Building & Research

9.1 Training is a critical component in technical upgradation and formalization of micro food processing enterprises. All individuals & institutions members receiving grant would undergo training for upgradation of their skills. In addition, training support would also be provided to other existing individual units and groups producing ODOP product in the district, even if they are not being supported through

credit linked grant. Training support would also be provided for units that are part of support for Marketing & Branding or have potential to join such network.

9.2 National Institute for Food Technology Entrepreneurship and Management (NIFTEM) and Indian Institute of Food Processing Technology (IIFPT), two national level food processing technology institutions under MOFPI are given responsibility to spearhead capacity building and research. At the State level, they would partner with a State Level Technology Institution in food processing technology selected by the State Government for conducting capacity building and training.

9.3 Training to individual and group beneficiaries will focus on entrepreneurship development, essential functions of enterprise operations, book keeping, registration, FSSAI standards, Udyog Aadhar, GST Registration, general hygiene, packaging, marketing etc. Specific training designed on the model of ODOP and the vertical focus products will be undertaken nearer to the work place of the entrepreneurs. Existing infrastructure of Rural Self Employment Training Institutes (RSETI) and other institutions at the district level will be utilized for imparting training.

10. Partner Institutions

10.1 The scheme lays special focus on SCs/STs, women and aspirational districts and FPOs, SHGs and producer cooperatives. TRIFED, National SC Development Finance Corporation, NCDC, Small Farmer Agri-Business Consortium (SFAC) and National Rural Livelihood Mission under Ministry of Rural Development have been working in these areas. The above institutions may converge their activities by facilitating identification of units / clusters of STs, SCs, cooperatives, FPOs and SHGs respectively and feed this into state PIPs.

11. Implementation & Monitoring Mechanism

11.1 The Scheme will have the following management structure at the Central, State and District level for effective implementation and monitoring of the scheme:

11.2 Inter-Ministerial Empowered Committee (IMEC): IMEC at the Central level, will be chaired by Minister for Food Processing Industries (MoFPI) for general superintendence, guidance and overall direction for implementation of the scheme, monitoring of progress and reviewing its performance. IMEC will approve scheme guidelines, Project Implementation Plan (PIP) of the State/ UTs under the scheme and various projects of capital investment by SHGs/FPOs/ cooperatives, common infrastructure facilities and proposals of marketing & branding for project size above Rs 10 lakh. A Project Executive Committee (PEC) will be constituted in MoFPI for undertaking administrative function and regular monitoring of the scheme at operational level. A National Programme Management Unit (NPMU) will be set up to assist MoFPI to provide secretarial, managerial and implementation support.

11.3 State Level: State Governments would appoint a Nodal Department and a State Nodal officer to oversee the implementation of the Scheme. The Scheme will be implemented by a State Nodal Agency (SNA) assisted by the State PMU. A State Level Approval Committee chaired by the Chief Secretary will oversee the implementation of the Scheme. The Committee will sanction expenditure up to Rs 10 lakh on various activities related to the implementation of the scheme. A District Level Committee (DLC) would be constituted under the Chairmanship of District Collector.

11.5 District Resources Persons (DRPs) would be appointed by SNA for providing handholding support to the beneficiaries. Handholding support would be for preparation of DPR, taking bank loan, support for obtaining necessary registration and licences including food standards of FSSAI, Udyog Aadhar, GST etc.

12. Studies & Reports

12.1 State Governments should undertake the following studies:

(i) **Base-Line Assessments:** A baseline study should be undertaken to identifying ODOP. This study should get concluded by 31 July, 2020 in each State. For this study, Rs. 2.5 – 10.0 lakh would be provided to the States.

(ii) **State Level Upgradation Plan(SLUP):** Once decision is taken on the ODOP, detailed studies should be carried out in the States detailing the number of units undertaking processing of that product in the district, farm level of operations, total volume and value of produce, technology, farm gate level processing, storage, warehousing, etc. This study should be concluded by 31 December, 2020. The amount provided for the above study would be Rs. 25.0 – 75.0 lakh to States.

13. Detailed Guidelines

Detailed guidelines of the scheme may be view at Ministry's website mofpi.nic.in

MINISTRY OF FOOD PROCESSING INDUSTRIES
GOVERNMENT OF INDIA

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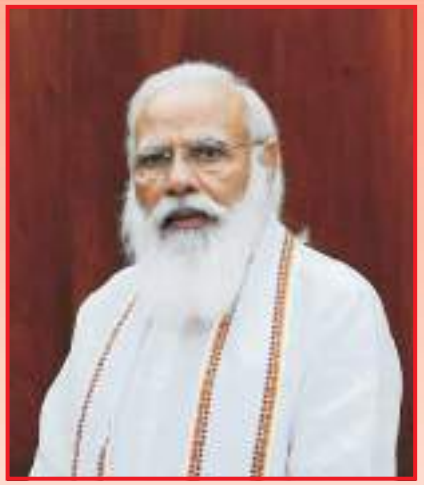
Department of Horticulture Kashmir

2021



An initiative of doubling Farmers Scheme

Modified High Density Plantation Scheme

Directorate of Horticulture Kashmir

Inauguration of Modified High Density Scheme

By

Shri Manoj Sinha

Hon'ble Lt. Governor of
Union Territory of
Jammu and Kashmir

Shri Narendra Singh Tomar
Hon'ble Union Minister of
Agriculture & Farmers Welfare

Shri Manoj Sinha
Hon'ble Lieutenant Governor of
Jammu and Kashmir

Highlights of the Scheme

- A variety of Fruits to be Covered
- Only Exotic Latest Varieties to be Planted
- Min.area of 01 KanalEligible
- 50 % Subsidy
- Loan by Financial Institutions
- Capitalization of Interest for 03 Years
- Repayment of Yearly Instalments From 4th Year

Sushri Shobha Karandlaje
Hon'ble Minister of State
for Agriculture and
Farmers' Welfare

Shri Kailash Choudhary
Hon'ble Minister of State
for Agriculture and
Farmers' Welfare

Government of Jammu & Kashmir
Department of Horticulture
Kashmir

Modified High Density Plantation scheme for Apple, Walnut, Almond, Cherry, Mango, Litchi, Olive etc. in collaboration with NAFED.

Courtesy: - Directorate of Horticulture
Kashmir, Rajbagh Srinagar.

Introduction:

High Density Plantation scheme was launched by JK Union Territory Government in collaboration with National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED). The scheme has been launched for High Density Plantation of Apple, Walnut, Almond, Cherry, Mango, Litchi, Olive etc. The scheme shall remain effective w.e.f. March 2021 to March 2026. A targeted area of 5500 hectare will be covered in the Union territory of Jammu and Kashmir under the scheme.

The scheme has been launched with the objectives of enhancing production & productivity and raising the farmers income.

COMPARISON

High Density Plantation	Conventional Plantation
More number of plants per unit Area e.g in Apple 3333 no. of plants are accommodated/Ha of land.	Less number of plants per unit areea e.g only 250 plants/ha are planted in one Hectare of land
More Yield per unit area e.g An yield of almost 60 M.Ts per Hect. can be obtained	Less Yield per unit area Only 12 M.Ts per Hect. are obtained at this time.
Maximum Production of A-Grade Quality	Only 30-40% of Produce is of A - Grade quality
Early Bearing; plant can produce fruits only in 2nd year of plantation in case of Apple	Late Bearing; almost takes 7-8 years to produce 1st crop
Management practices like Pruning, fertilization etc. are easier	Difficult Management practices
Damage due to various natural calamities such as hail-storm can be prevented /minimized.	No such Prevention is possible in case of traditional system.
High Benefit cost ratio, so economically more viable	Low Benefit cost ratio, so economically less viable

Qualifying Orchard Area:

A Minimum of 1 kanal and maximum of 20 kanals of land will be covered per beneficiary under this scheme. However, priority will be given to the orchardists with less than 04kanals of land.

Duration:

The said scheme shall remain effective for five years w.e.f. March 2021 to March 2026.

Target:

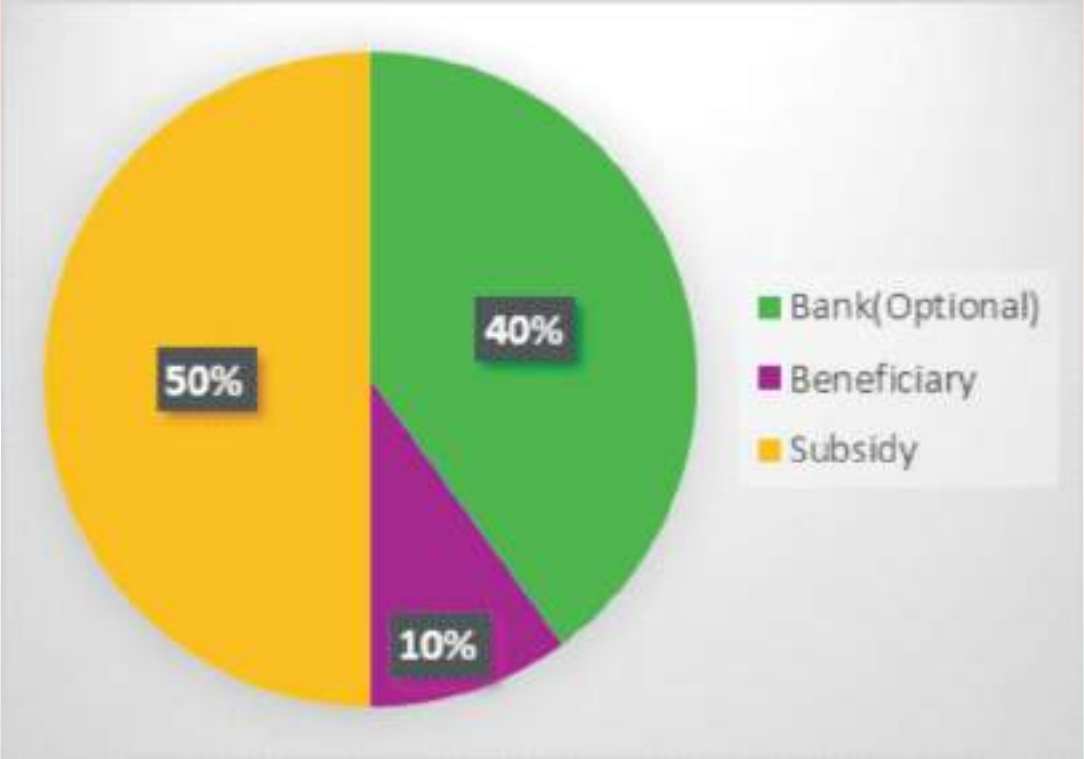
Under High Density Plantation scheme a target of 5500 hectares has been fixed.The year-wise breakup is as under.

Year	Area
2020-21	500
2021-22	1000
2022-23	1000
2023-24	1000
2024-25	1000
2025-26	1000

Funding Pattern:

The funding pattern under the scheme will be 50:50 between the Government & the farmer.

FINANCING PATTERN



- 40% Banks (optional)
- 10% Beneficiary
- 50% Subsidy /assistance of the project cost (maximum upto 22.15 lacs per hectare for apple)

Repayment of Loan

1 Capitalization of interest for 3 years.

2. Repayment in yearly installments from 4th year and onwards.

Component wise subsidy/support for High Density Plantation for Apple (3333 plants per Hectare)

S. No.	Component	Estimated cost per Ha.	Maximum admissible assistance	Beneficiary share
01	Cost of Plant material (5 feathered & above) for 3333 trees (1x3m)	16.67	13.20	3.47
02	Cost of 4-wire trellis system (with installation)	12.00	6.00	6.00
03	Cost of anti-hail net (with installation)	8.00	1.75	6.25
04	Cost of micro-irrigation system	2.40	1.20	1.20
05	Land Development	1.50	-	1.50
06	Pit digging	2.33	-	2.33
07	Cost of vermi-compost unit	0.80	-	0.80
08	Pesticides	0.40	-	0.40
09	Plant Protection Machinery	0.20	-	0.20
Total		**44.30**	**22.15**	**22.15**

Role and responsibilities of Stakeholders:

UT Government:

i. Director Horticulture Kashmir/Jammu shall identify beneficiaries and provide the list to NAFED / Private Enterprise and Financial Institution (Bank-in case loan is availed).

ii. CHO concerned will provide list of varieties and specification to NAFED/ Private Enterprise with a copy to Bank

iii. Provide Technical Specification of Trellis system and Drip Irrigation System to NAFED /Private Enterprise with copy to Bank.

iv. Supervise operations/implementation and obtain project status.

v. Obtain status/feedback from the farmer, private enterprise and Bank.

vi. Provide necessary technical guidance, information and awareness to the farmers/beneficiaries.

vii. To notify the varieties of Apple and other fruits/country of origin for High Density Plantation.

viii. To nominate members(s) in the JIT.

ix. To facilitate the Joint Inspection immediately.

x. Release the subsidy directly to beneficiary in case the orchardist does not opt for loan.

xi. Concerned Chief Horticulture Officer shall verify the land offered by the beneficiary to the effect whether it is suitable for High Density Plantation or not.

Farmer:-

i. Submit an application to the Horticulture Department (DH K/J) along with land details (ownership proof) to Join the scheme.

ii. Provide land and carryout required activities as are necessary before plantation.

iii. Deposit his share (equity) with the bank and

collateral to the extent of loan component plus upto25% in case loan is availed.

iv. Provide labour for plantation.

v. Undergo training and attend awareness camps organized by Horticulture Department jointly with other stakeholders Financial Institutions + NAFED (FI+ NAFED).

vi. Provide periodical feedback to the Government/Financial Institutions.

vii. Repay regularly the term loan after moratorium period from 4th years in case loan is availed from financial institution.

viii. Provide his share of amount as per guideline to private enterprise depending upon the progress.

Financial Institution-Designated Bank:

i. Create a Special cells at Zonal/Divisional level/ Headquarter to implement the scheme.

ii. Advise the branch in the area to accept the equity from Farmer and Collateral.

iii. Receive grant from the government which shall be apportioned and released as per the scheme.

iv. Release mobilization advance to the NAFED /Private Enterprise against bank guarantee /any other instrument.

v. Nominate an officer as JIT member for audit of the orchard(s) and sign work completion certificate as member of the JIT which shall be prerequisite for releasing the payment as per the schedule.

NAFED:

i. NAFED will be responsible for import of planting material.

ii. Receive the detail of proposed beneficiaries from concerned chief Horticulture officer.

iii. Install a High-Tech Lab for certification as per international standards in Jammu & Kashmir.

iv. Install virus Indexing labs in Jammu and Kashmir.

v. To provide bank guarantee against the mobilization advance.

vi. Arrange/Import plant of specified quantities from the identified countries. Government can facilitate by way of certification of quality and quantity as per action plan.

vii. Arrange material for other components (Trellis system, drip irrigation, anti-hail net and other machinery/equipment, if required) as per specification given in the scheme.

viii. Provide training to the farmers/growers.

ix. Nominate representative in the JIT.

x. Furnish the periodical status report to the Government.

xi. Receive the balance payment/cost as per the scheme from beneficiary.

xi. Do handholding for three years by way of inspection, advice and implementation of corrective measures (Trellis/Drip irrigation/ Anti-hail net) if any, and replacing the dried plants.

DETAILS CAN BE HAD FROM:

Office of Director General Horticulture Kashmir/
Directorate of Horticulture Jammu/
All Chief Horticulture officers of J&K

(K):0194-2311484 **(J):**0191-2501219

District Offices		
Chief Horticulture Officer, Srinagar	(0194)	2311456
Chief Horticulture Officer Budgam	(01951)	255278
Chief Horticulture Officer Kupwara	(01955)	262665,262229
Chief Horticulture Officer Baramulla	(01954)	222292,222829
Chief Horticulture Officer Pulwama	(01933)	219251,242888
Chief Horticulture Officer Shopian	(01933)	260280,260281
Chief Horticulture Officer Anantnag	(01932)	223041
Chief Horticulture Officer Kulgam	(01931)	215358
Chief Horticulture Officer Bandipora	(01957)	225101
Chief Horticulture Officer Ganderbal	(0194)	2109167,2416875, 2416679

Director General Horticulture Kashmir inspects High Density Apple Orchard

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محکمہ ہارٹیکلچر کشمیر

Department of Horticulture Kashmir

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