



## **6. Brief Project description**

This is a consortium based project involving public, private organizations and other stake holders with integration as the main focus. M/s. Jewargi Agro Food Park Ltd (JAFPL) is a pioneering organization with the objective of integrating the food supply chain. JAFPL is a joint venture company promoted for the establishment of an Agro Food Park at Jewargi in Gulbarga district of Karnataka. JAFPL is an Agri-food infrastructure project with state-of art infrastructure facilities and other support services provided for establishing Agri-food business enterprise/industry for domestic as well as Multi-national companies. The project will handle food grains, fruits and vegetables, spices, medicinal and aromatic crops. The Mission of this Company is to be hub in the integrated food supply chain and work with "Farm to Fork" concept. JAFPL has already tied up with several companies for backward linkage and forward linkage apart from technical support required for the implementation and management of the project.

Jewargi Agro Food Park is tied up with University of Agricultural sciences, Bangalore and Institution of Agricultural technologists, Chitradurga chapter in a consortium mode to plan and implement the NAIP project.

The project would identify patchouli variety suitable for under cropping in the coconut plantation in the Hiriyur region. Also develop good agricultural practices suitable for the region to increase the productivity their by farmers income.

The project focus on quality and quantity of patchouli oil through adopting of suitable and better post harvest techniques like drying, curing, handling, transportation of patchouli leaves as also through demonstration of efficient pretreatment and distillation methods of extraction of oil.

Chemical analysis of Hydrosol (spent water) and spent material obtained during steam distillation shall be analyzed to develop value added products and processes. The composition of By products obtained during steam distillation can be utilized in preparation of aggrabattis and other products. UAS, Bangalore and JAFPL will conduct studies to develop process and product for commercial applications.

The project intends to develop an advance marketing arrangement with patchouli oil and by products buyers or organizations to bring in transparency and enhance income levels of farmers.

The project will enhance the income levels of coconut growers in the project area. The project will focus on research to identify high yielding patchouli variety suitable as an under crop in coconut plantation, good agricultural practices, adopt innovative and scientific processing technologies to enhance productivity and efficiency and develop value added by products. Overall the project focus on enhancing income of existing coconut grower, developing standards and protocols for processing, by-product development and create opportunity for entrepreneurs

to take up patchouli cultivation, processing and value addition industries. The project will develop commercial reports for replication of the successful model elsewhere in the country.

In this project, development of any process/ technology will start after studying the market requirement and will come from the partner involved in marketing. Since it is market driven commercialization of technology and its adoption will be smooth and easier. Technical incubation is an important component of this project. This will reduce the risks of investments as also promote entrepreneurship. Scaling up of technology is a part of the project as several project components look at commercial applications of products/ processes or technologies developed

#### 7. Environmental Category issues in the subproject

- **Social** The project will integrate all the stake holders in the supply chain, generate rural employment which is very much needed and cause for the development of the region. This will enable the farmer to be more educated and aware of the requirements as also boost his societal status.
- **Environmental:** This project does not pose any environmental problems. Processing close to the production area / rural areas will reduce the environmental problems which would otherwise be present, if processing is undertaken in / or close to cities. Since it will generate a lot of organic matter, it will also help the soil to improve its organic matter content, texture and structure.

#### 8. Safeguard policies triggered (World Bank Policies)

Safeguard policies	Yes	No
Environmental assessment (OP/BP 4.01)	x	
Natural habitats (OP/BP 4.04)		/
Pest management (OP 4.09)		/
Cultural property (draft OP 4, 11-OPN 11.03-)		/
Involuntary resettlement (OP/BP 4.12)		/
Indigenous peoples (OD 4.20)		/
Forests (OP/BP 4.36)		/
Safety of dams (OP/BP4.37)		/
Projects in disputed areas (OP/BP 7.60)		/
Projects on international waterways (OPBP 7.50)		/

## **B Risk analysis and related issues**

The project does not foresee any major risks other than listed below. Anything encountered during implementation of the project will be handled judiciously

- Identification of suitable patchouli variety for project area.
- Adoption of good agricultural practices and integrated pest management.
- Effective utilization of patchouli by products obtained after steam distillation.
- Advance marketing and tie up with farmers for procurement of patchouli leaves and oil.
- Identifying new markets or channels for marketing of patchouli oil and by products.
- Training farmers and supply of agricultural inputs during the project period.

### **9. Impact assessment**

*Adequately addressed (Annexure I and II)*

**10. Potential indirect and/or long-term impacts due to anticipated future activities in the project areas (assessment of anticipated conflict/complimentarily with the current as well as those proposed for the next five years) in the areas of activities of the sub-project.**

The long term impact of this project is that it will become a model for replication in other areas as well as for other crops. This multiplier effect will have major socio economic benefits specifically in the region and more generally across the agriculture sector. This project aims to be a trendsetter in the agriculture sector.

The socio economic status of the farming community in the region will improve, thereby improving education and health status of the community. The interaction and close networking with various stake holders will ensure the awareness of the farmers increases thereby societal status will be enhanced.

The project envisages development of rural and semi- urban areas as also create job opportunities in these areas. This would reduce migration from rural areas to urban areas cities which will have environmental impact. The project will stimulate Rural entrepreneurship and wealth creation opportunities

All the stakeholders will understand the benefit of an integrated approach and work towards strengthening the team work. The project will also showcase the possible impact through utilization of Research and Development, technology transfer and scientific approach.

11. Identify the key stakeholders and describe mechanisms for consultation with and to them done/disclosure so far done including pre-project consultation with the stakeholders, stakeholders' workshop before formulating the full proposal, discussing the full proposal with some stakeholders before submission to the PIU.

Following are the consortium partners and stake holders in the project

**Public institutions**

- University of Agricultural Sciences (UAS), Bangalore.
- Karnataka soaps and detergents limited (KS&DL), Bangalore.
- Central Institute For Medicinal And Aromatic Plants (CIMAP), Bangalore
- Fragrance and Flavor Development Centre (FFDC), Kannauj.
- Jewargi Agro food park Ltd (JAFPL), Bangalore
- State Bank of Hyderabad, Bangalore.

**NGOs**

- Institution of Agricultural Technologist (IAT) Chitradurga chapter, Karnataka.
- Farmers/farm organizations

**Private organizations**

- Green India Food Trading Company Pvt Ltd. (GIFT) Bangalore.
- Greendeal Consultancy & Overseas Pvt Ltd., (GDC) Bangalore.
- Processing industries
- Equipment manufacturers

**International organizations**

- M/s. JOGUE Incorporation USA. (Flavour & fragrance manufacturer)

Extensive discussions have been held with the consortium partners and associate partners. We have had preliminary meetings and discussion with other stake holders. The inputs emanated out of the meetings have been incorporated for development of proposal and action plan for actual implementation of the project.

## 12. Chronology of meetings/ activities held in connection with preparation of the concept note and full proposal

Sl. No.	Date	Programme	Participants	Remarks
1	8.05.2008	NAIP awareness orientation program	Divisional heads	To understand about objectives and guidelines of NAIP
2	13.05.08	Brain storming session	JAFPL Officers, Horticulture experts	To shortlist and identify crops / project of great relevance and impact.
3	24.05.08	Concept note briefing and discussions	JAFPL Officers, Horticulture experts	To discuss the objectives goals and outcome of the proposed project.
4	28.05.08	Concept note finalization	JAFPL Officers, UAS Scientists, KS&DL & IAT	Review and finalize the concept note.
5	18.08.08	Personal interactions and discussion	JAFPL & UAS	To get inputs for core program
6	23.08.08	Telephonic discussions	JAFPL & KS&DL	Inputs on core program
7	24.08.08	Telephonic and personnel discussions	JAFPL & IAT	Inputs on core program
8	Aug/sep 2008	Telephonic discussions and E-mail interactions.	JAFPL & NAIP Help desk.	Discussions about core program
9	25.09.08	Meeting	JAFPL & UASB	Discussion for full proposal
10	26.09.08	Meeting	JAFPL & IAT	Discussion for full proposal
11	26.09.08	Telephonic discussion	JAFPL & KS&DL	Discussion for full proposal
12	6.11.08	2 <sup>nd</sup> meeting with Technical group at New Delhi	JAFPL & NAIP	Presentation and review of the proposal
13	11.11.08	Telephonic and personnel discussions	JAFPL & UASB	Discussion on researchable issues and areas.
14	14.11.08	Telephonic and personnel discussions	JAFPL & CIMAP	Inputs for the proposal.
14	19.11.08	Telephonic and personnel discussions	JAFPL & UASB	Finalization on researchable areas and issues on patchouli
15	23.11.08	Meeting	JAFPL & KS&DL	Finalization on role of the organization and request of consent letter.
16	6.12.08	3 <sup>rd</sup> meeting with Technical group at New Delhi	JAFPL & NAIP	Presentation and review of the proposal

17	22.01.09	RPC meeting at Delhi	JAFPL & NAIP	Presentation of the proposal
18	23.01.09	Cost committee meeting at Delhi	JAFPL & NAIP	Negotiations and finalization of the project budget.
19.	25.02.09	PMC meeting at Delhi	JAFPL & NAIP	Presentation and discussion

### 13. Measures to address the issues:

Farmers' Education and Training on the use of IPM will be conducted for the participating Farmers in the sub-project. Project shall focus on use of organic fertilizers to improve the soil health.

Awareness of risk related factors will be addressed to the stakeholders through orientation sessions on topics such as farmers training, adoption of improved package of practices in a holistic way, extraction of oil, utilization of by products and other. Issues such as steam distillation and packaging interventions will be addressed as far as possible so as to take care of environmental safeguards etc.

### 14. Consultation/disclosures to be done in future:

Local disclosure through mechanisms such as launch workshop, interfaces during the implementation stage of the sub-project for sharing the results and soliciting feedback, circulating project brochures and implementation progress from time to time, putting up annual reports on the website and annual stakeholder workshops wherever feasible.

Circulation of project brochures and implementation progress from time to time, putting up annual reports on the web site and annual stakeholder workshops wherever feasible.

The circulation disclosures will be done as per NAIP guidelines depending on the progress of the project. Training, demonstration programmes and workshops on various themes relevant to farming, primary processing, post harvest, product preparations, packing, labeling, retrofitting, nutritional benefits awareness, recipe making marketing aspects etc., will be showcased. The project findings will be disclosed time to time through brochures/CDs/Videos/literatures and necessary feedback will be collected for further improvement and better implementation. Assistance of different related organizations will be availed.

- Dissemination of holistic crop management and extension services to farmers through partners.
- Demonstration of best post harvest management practices to all stakeholders
- Demonstration of new product preparation to stake holders
- Dissemination of information and sensitization of line departments of state and central governments to policy makers, planners and project partners
- Popularization and awareness creation to consumers
- Information dissemination through mass and print media on benefits across the supply chain, health and nutritional benefits to consumers.
- Linkages with financial institutions will be enabled so that as and when required, the farmers and the other entrepreneurs/ industries are adequately financed for their commercial activities.

Consortium PI

National Coordinator

National Director

## Annexure I

## Environmental safeguard: Activities, Issues, Impact and Mitigation Measures

Activities <sup>1</sup>	Issues <sup>2</sup>	Anticipated level of impacts <sup>3</sup>		Mitigation measures (negative impact) <sup>4</sup>
		Positive	Negative	
Upgradation of integrated laboratory for soil analysis and residual testing equipments	Minimize/ eliminate non discriminate use of pesticide Soil and pesticide analysis on a regular basis will provide data for effective monitoring and awareness among farmers. This can help minimize the environmental damage to soil	4		
Establish a model nursery and demonstration plot for promoting patchouli farming	Optimal and efficient use of natural resources including water	3		
Under cropping of patchouli in coconut plantation	Effective utilization of resources - land, water and manpower	4		
Use of chemical fertilizers and pesticides	Soil degradation		1	Integrated pest management and use of farm yard/organic manure.

## Annexure II

## Social safeguard: Activities, Issues, Impact and Mitigation Measures

Activities <sup>1</sup>	Issues <sup>2</sup>	Anticipated level of impacts <sup>3</sup>		Mitigation measures (negative impact) <sup>4</sup>
		Positive	Negative	
Patchouli under cropping	Requirement of additional funds		2	Project envisages buy back arrangement and tie up with banks for funding
Patchouli Under cropping	Source of additional income for farmer	4		
Farm Mechanization	Utilization of lesser human resource		1	Minimal farm mechanization shall be adopted.
Networking among stake holder and dissemination of information	Improves working relationship and enhance knowledge level of farmers	4		