

# **A Value Chain on Enhanced Productivity and Profitability of Pashmina Fiber**

## **Environmental and Social Safeguards Management in NAIP**

### **A. Basic Information**

#### **1. Project Statistics:**

Component Code	2-PCS
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Name of Consortium	Dr. Sarfaraz Ahmad Wani
Principal Investigator	
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Consortium Partners	1. CSK HP KVV Palampur, India 2. CSWRI Avikanagar- Rajasthan, India 3. Department of Sheep Husbandry Kashmir , J&K, India
<b>2. Date of Start</b>	28 January 2009
<b>3. Planned Duration</b>	Years 03 Months 06
<b>4. Project Cost</b>	Rs 943.034 lacs
<b>5. Project Objectives</b>	1. Augmentation of Pashmina Production and Productivity. 2. Improvement in Pashmina Utilization

#### **6. Brief project description**

The proposed project on “A Value Chain on Enhanced Productivity and Profitability of Pashmina Fibre” will be under taken by *Sher-e-Kashmir University of Agricultural Science and Technology of Kashmir (lead Centre)* and three partners viz: *CSK HP KVV Palampur, CSWRI Avikanagar- Rajasthan, and Department of Sheep Husbandry Kashmir*. All the partners

are carefully chosen for effective implementation of targeted work programme in identified Production and Processing areas of Pashmina.

SKUAST-K is a leading institute and has already successfully undertaken ICAR funded projects entitled “ **Processing of different hair and wool for Value added products**” (under NATP); “**Documentation, Characterization and improvement of Pashmina goats in Ladakh**” (Under ICAR, AP cess fund); and “**Economic production and Marketing of Pashmina in Cold arid regions of J&K- implications towards livelihood**” (under ICAR, AP cess fund). These projects have revealed that the Productivity and Production of Pashmina is low due to critical gaps in the goat farming production system including processing of fibre, despite the fact that wide genetic variability exists in the germ plasm and scope also exist for intervention in the feeding, housing, pasture management, health cover and other aspects of production. The harvesting and post harvest processing revealed low economic returns due to use of obsolete tool and techniques rendering the whole operation labour intensive, hazardous and full of drudgery.

CSK HP KVV, Palampur has carried out a research work on Animal Genetic Resource Bio-diversity Sub-Project “**Characterization and Conservation of Chegu goats**” (Under NATP) and other Network projects on Animal Genetic resources (ICAR/NBAGR). The study has revealed that Chegu goat population is in critical state as well as production is very low although possibilities for improvement do exist.

CSWRI is a leading institute dealing with the processing of different types of animal fibres including Pashmina. They have carried out the work on utilization of different animal fibres including Pashmina in different blends and are involved in the improvement in tools and techniques for processing of different animal fibers.

Sheep Husbandry Department is Development department mandated with the objectives of enhancing Productivity of Sheep and Goat including Pashmina Goats. Also the Department has full fledged two Pashmina Goat Breeding Farms at Upshi Leh and Khagryal Kargil

Broadly, the project consists of 2 components with two broad objectives and different activities under them:

**First objective** is aimed at the **improvement in Productivity and Production of Pashmina Fibre**. The average Pashmina productivity in the country is low (250g/animal/year) compared to world productivity of 700-900g/animal/year. There is great scope in enhancement

of Pashmina productivity if the existing diversity of the Germplasm in the region (100-900g Pashmina fiber yield/animal/year) is exploited scientifically. Moreover, the Production system in the area is still primitive and extension of the advances in breeding, feeding, health and managerial practices will result in enhancement of both Productivity as well as Production of Pashmina, thereby increasing the economic returns to the farmers. Fillip in the horizontal growth of Pashmina production is also envisaged by experimenting the introduction of the Pashmina goat in **Non-Traditional belt**, having niche for the Pashmina goat rearing. Successful introduction shall meet growing demand of the cottage sector in the country.

**Second Objective** is aimed at **Improvement in Pashmina Utilization**. The processing of Pashmina is undertaken at cottage level by economically weaker sections of the society including women. The processing methodologies presently followed are obsolete/ inefficient and full of drudgery resulting in low returns (Rs.50-60/worker/day). Therefore, any effort for improvisation of harvesting and processing tools, techniques and skill development among stakeholders will improve the overall processing efficiency, thereby increasing net returns to the artisans involved in the trade. This improvement will also ultimately act as a catalyst for higher employment generation in the sector.

Lastly the projects also involve creation of Self Help Group for market Promotion of both raw Pashmina and its products. Facilities like credit and exhibition/fares shall also be initiated.

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

- Social
- Environmental

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

<b>Safeguard Policies</b>	<b>Yes</b>	<b>No</b>
Environmental assessment (OP/BP 4.01)	X	
Natural habitats (OP/BP 4.04)		X
Pest management (OP 4.09)		X
Cultural property (draft OP 4, 11-OPN 11.03-)		X
Involuntary resettlement (OP/BP 4.12)		X
Indigenous peoples (OD 4.20)		X
Forests (OP/BP 4.36)		X
Safety of dams (OP/BP4.37)		X

Projects in disputed areas (OP/BP 7.60)		X
Projects on international waterways (OPBP 7.50)		X

## B. Risk Analysis and Related issues

- Availability and procurement of the elite germplasm for distribution among the progressive goat farmers may be a problem due to slaughter of the goats for meat for immediate remuneration to farmers and if funds are inadequate.
- Inadequate feed/fodder resources especially during winter, when surface grazing becomes almost non-existence (temperature in winter falls as low as -40°to -50°).
- High Kid Mortality rate (up to 40%)
- Introduction of Pashmina goat in non-traditional areas with similar niche for horizontal expansion may not find feasibility.
- Replacement of synthetic hazardous chemical colouring agents with natural agents for dyeing and finishing of Pashmina products.
- Inadequate availability of designs, inadequate consumer choice of designs of Pashmina products.
- Improvisation in Pashmina harvesting and processing tools may not find user preference

## 9. Impact assessment

Adequately addressed in Table 1 and 2.

## 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 state developmental department (Sheep Husbandry Department), a consortium partner in the project, serves the target areas on a regular basis. Human resource development, capacity building of the resource personals in such departments; strengthening of the infrastructure (germplasm production centers) are targeted to serve the poorest of the poor (Changpa-nomads) by improving the quality of the natural resources and providing better access (production and supply of the elite germplasm) to these natural resources to poor goat farmers.

- Building linkages between producers and processors (strengthening / revival of Self-Help groups, Pashmina producers and processors societies, ) shall exclude the middle men and ensure better remuneration to the producers and supply of the raw material to the processors in the cottage industry.
- Improvement of the Pashmina productivity shall make the goat economically viable and help its conservation by the farmers on a long term basis.
- Improved Pashmina production shall help in augmenting efforts for conservation of Chiru.
- Exploitation of the Pashmina processors / traders would be checked by development of the **quality standards** for the Pashmina products.
- Better linkages among farmers, processors, development departments, R & D organizations shall be established.

**11. Identify the key stakeholders and describe mechanisms for consultation / disclosure so far done (widely sharing documents on the sub-project, other mechanisms to get a buy-in with stakeholders including the farmers).**

**Public Institutions:**

1. SKUAST-K.
2. CSK HP KVV, Palampur.
3. CSWRI, Avikanagar.
4. Sheep Husbandry Department Kashmir.

**Private Participation:**

1. Changpas/ Pashmina Breeders.
2. Spinners.
3. Weavers

**NGO's:**

1. Kashmir Hand Made Pashmina Promotion Trust (KHPPT, Kashmir), Srinagar, J&K.
2. TAHFUZ (All J & K Handicraft Society), Srinagar, J&K.
3. Bhuttico Weavers Association, Kullu HP.
4. Shivaco Shawls, Kullu, H.P.

Preliminary discussions were made with few stakeholders and NGO's before developing the project. They were made aware of NAIP Project, objectives and expected outcome and impact. The final modalities will be worked out after the project approval.

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

S.No.	Date and Location	Programme	Participants	Remarks
1	10 <sup>th</sup> May 2008 SKUAST-K, Srinagar	Interaction meeting with Development Departments	SKUAST-K, SHD Kashmir	To evolve consensus on need for improvement in production and Processing of Pashmina
2	18 <sup>th</sup> May 2009 SKUAST-K, Srinagar	Interaction meeting with Entrepreneurs	SKUAST-K, KHPPT and TAHFUZ	To discuss lacunae in the processing tools and techniques.
3	20 <sup>th</sup> May 2009 SKUAST-K, Srinagar	Interaction meeting with R and D Institutions	SKUAST-K, CSWRI Avikanagar, CSK HP KVV Palampur	To discuss the project formulation and role of each partner.
4	30 <sup>th</sup> May 2008	Submission of Concept note	SKUAST-K	Concept Note approved
5	16 <sup>th</sup> – 18 <sup>th</sup> Sep 2008, CIFE Mumbai	Interaction workshop on development of project	SKUAST-K, CSK HP KVV Palampur, NC NAIP, ND NAIP, Director Finance and other members of Management Committee.	A methodology for development of detailed project was elaborated and incorporation of SHD as Partner instead of associated centre.
6	27 <sup>th</sup> Sep 2008 SKUAST-K, Srinagar	Interaction meeting	Associated Scientist of SKUAST-	Development of Project Document.
8	5-9 Oct 2008 SKUAST-K, Srinagar	Development of Project Document through interaction and Telephonic Discussion.	Associated Scientist of SKUAST-K, CSWRI, CSK HP KVV, SHD Srinagar.	Development of Project document.
9	10-11 Nov 2008 PIU, New Delhi	TAC Meeting	SKUAST-K, CSWRI Avikanagar, CSK HP KVV Palampur, PIU and TAC Advisory Committee.	Technical Programme were discussed. Suggestions were made for change of title and technical programme approved.
10	17- 18 Nov 2008 PIU, New Delhi	RPC meeting	SKUAST-K, CSWRI Avikanagar, CSK HP KVV Palampur, PIU and TAC Advisory Committee.	Technical Programme was formulated. Final technical programme was approved.
11	21 Nov 2008 SKUAST-K, Srinagar	Interaction meeting	Associated Scientists of SKUAST-K	Development of Project Document.
12	25 Nov 2008 PIU, New Delhi	Cost Committee Meeting	Director Finance, SKUAST-K, CSWRI Avikanagar, CSK HP KVV Palampur, NC NAIP.	Budget for the project was approved.
13	4 <sup>th</sup> Dec 2008 SKUAST-K, Srinagar	Interaction meeting	Associated Scientists of SKUAST-K	Development of final Project Document.
14.	6 <sup>th</sup> January 2009 PIU, New Delhi	PMC Meeting	Director General, PMC members, SKUAST-K, CSWRI Avikanagar, CSK HP KVV Palampur,	Final Project proposal was discussed and technical programme approved.

### **13. Measures to Address the Issues**

A document on safe guard matrix has been prepared. Farmers education and training on Breeding Programme, feed management, harvesting, and processing of Pashmina will be taken. To implement this, following strategies will be adapted.

- The selective breeding for improvement of Pashmina yield without compromising the quality of the fiber shall form the corner stone of the programme.
- The elite animal (bucks) shall be identified, procured and will be distributed in the identified areas having low productivity.
- Suitable interventions in feeding, health, shelter and grazing management of the Pashmina goats will be introduced after identification of critical gaps in these aspects.
- In order to expand the breeding area of Pashmina rearing, areas having similar agro climatic conditions shall be identified and Pashmina germ plasm (Bucks and Does) will be introduced for observing their production performances.
- The standard statistical methodologies will be used to select the stock and evaluate their performances.
- The families for utilization of Pashmina shall be identified based on the labour engaged in different stages of utilization. The thumb rule of 5 spinner: 1 weaver shall be adopted while selecting the technological intervention in processing.
- Use of Improved tools, techniques and designs.
- Use of organic agents for coloring and finishing.
- Development of quality standards of Pashmina and Pashmina products.
- Creation of awareness, knowledge base through demonstration, training and awareness camps.

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

- Project brochure would be developed with giving information on the objectives, targets, consortium partners and their role and responsibilities, workshops and trainings.
- Annual reports on the progress of the project and its circulation among all the stakeholders.
- Workshops / seminars in the target area to create awareness about the policies and the programs of the project.
- All means of affective local communication will be ensured. The project brochures will be distributed in local languages,
- Need based stakeholders workshop will be organized at the cluster level and all events of the project implementation and the results thereof will be put on the website giving all details.
- National seminar / Symposium will be organized at the end of the project to disseminate the knowledge generated to the stake holders , R & D organizations

**Consortium PI**

**National Coordinator**

**National Director**

## Safeguards Template for NAIP Projects

## 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	
Identification and distribution of elite germplasm to farmer families.	<ul style="list-style-type: none"> <li>• Low Pashmina productivity</li> <li>• Loss of biodiversity</li> </ul>	4		
Pasture improvement, soil fertility, rotational grazing	<ul style="list-style-type: none"> <li>• Low soil fertility</li> <li>• Low biomass production</li> <li>• Soil erosion</li> </ul>	3		
Introduction of Pashmina in non-traditional belt	<ul style="list-style-type: none"> <li>• Limited breeding tract for Pashmina goat</li> <li>• Low Pashmina production</li> </ul>	3		
Introduction of complete feed block	<ul style="list-style-type: none"> <li>• Inefficient use of biomass for animal feeding</li> <li>• Nutrient deficiencies</li> <li>• Biomass crunch</li> </ul>	4		
Increased livestock population and improved nutrition	<ul style="list-style-type: none"> <li>• Environmental pollution through increased methane production in the fragile-ecosystem</li> </ul>		2	Manure droppings of the livestock shall improve soil fertility resulting in higher pasture biomass production leading to carbon sink
Use of organic dyeing and finishing agents	<ul style="list-style-type: none"> <li>• Environmental pollution</li> <li>• Health hazards to workers</li> </ul>	4		

## 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	
Production and distribution of elite germplasm among farm families for increase in Pashmina production	<ul style="list-style-type: none"> <li>• Non availability of elite germplasm</li> <li>• Low production</li> <li>• Low economic returns</li> </ul>	3		
Pasture improvement, soil fertility, rotational grazing	<ul style="list-style-type: none"> <li>• Sparse availability of fodders</li> <li>• Disease / death due to nutritional deficiency</li> </ul>	3		
Health cover and low cost shelter	<ul style="list-style-type: none"> <li>• High mortality due to disease and inclement weather</li> </ul>	3		
Improvisation in Pashmina harvesting	<ul style="list-style-type: none"> <li>• Labour intensive</li> <li>• Non-availability of labour</li> <li>• More drudgery</li> </ul>	2		
Improvisation in Pashmina dehairing and processing tools	<ul style="list-style-type: none"> <li>• Inefficient tools</li> <li>• High drudgery</li> <li>• Low economic returns</li> </ul>	3		
Strengthening of Cooperatives	<ul style="list-style-type: none"> <li>• Exploitation by middlemen</li> </ul>	3		
Comprehensive linkages among stakeholders	<ul style="list-style-type: none"> <li>• Lack of integrated approach in value chain system</li> </ul>	4		

Improvement in livelihood of the target population	<ul style="list-style-type: none"><li>• Risk of cultural and trade shift</li><li>• Nomads may give up goat rearing</li></ul>		2	The targeted 40-60% increase in farm returns will ensure continuation of goat rearing as a source of livelihood
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