

Traditional Yak Herding in High Altitudes of Gilgit-Baltistan, Pakistan: Trans-boundary and Biodiversity Conservation

**International Programme on Research and Training on Sustainable
Management of Mountain Areas- IPROMO 2014**

17 July 2014

Group Members

Kanwal Waqar - Pakistan

Atanas Krantchev- Bulgaria

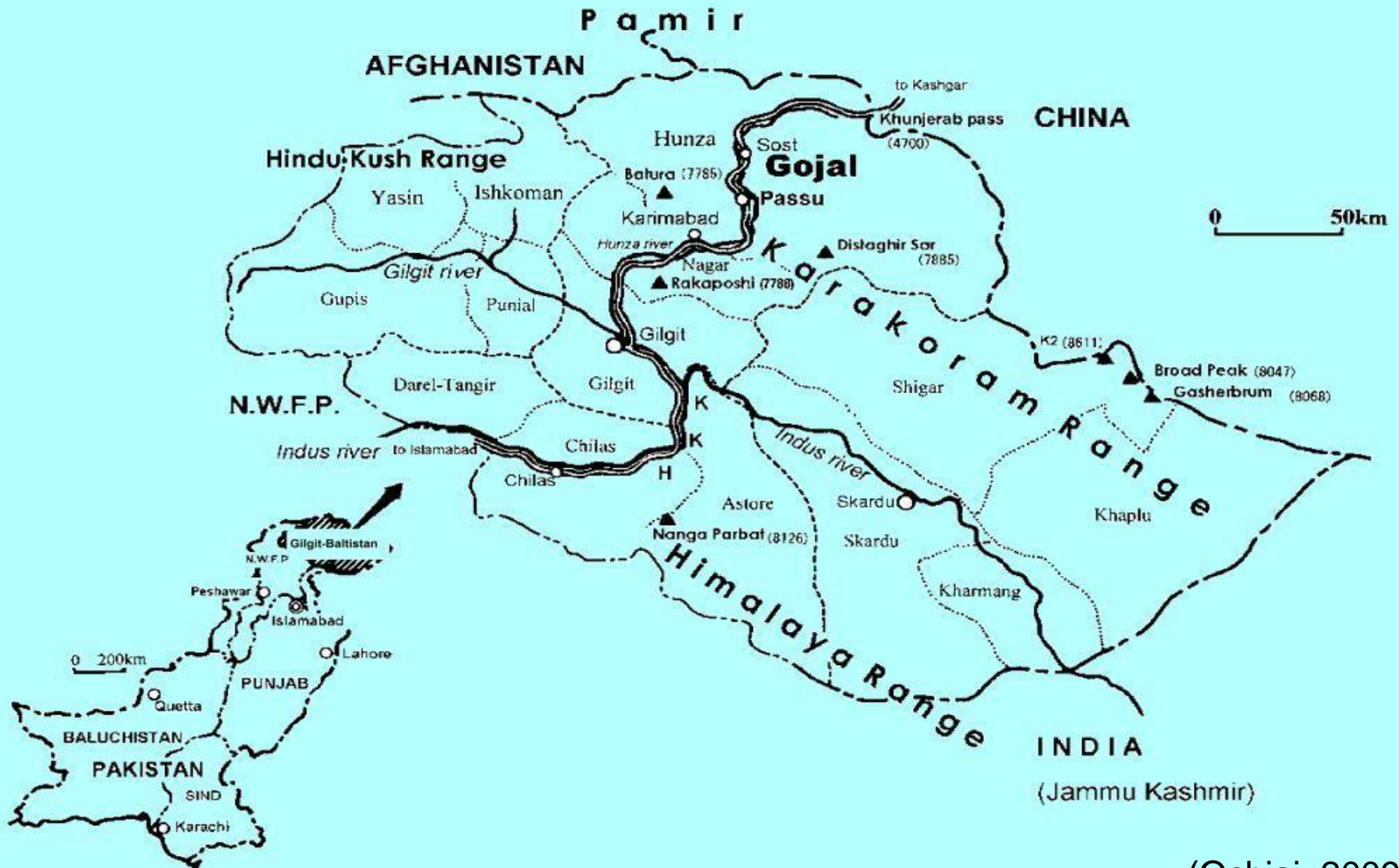
Suchita Shrestha – Nepal

Macpherson Nthara- Malawi

Lina Dorado- Colombia



I- Background



Gilgit Baltistan

- Government: Self-governing territory under Pakistani control
- Area: 72,971 sq. km
- 1% Agriculture land 1%, mountains, rivers and glaciers (66%), rangelands (23%) and forest (4%) (IUCN, 2002)
- Population: 2 million
- Districts: 7
- Literacy rate: 72%
- Highest mountains: K2(Mount Godwin Austan)

II-Yak Habitat in Gilgit Baltistan

The **yak** (*Bos grunniens* and *Bos mutus*) is a long-haired mammal found throughout the Himalayan region of south Central Asia, the Tibetan Plateau and as far north as Mongolia and Russia.

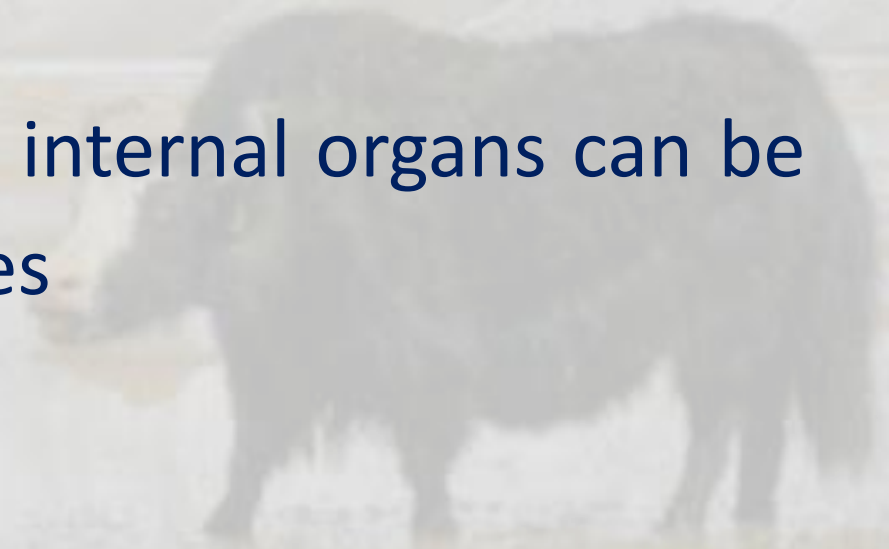
Yak is locally named as 'Dong' in Gilgit Baltistan, the male is popularly known as yak and the female is called yakmo.

The Hindu Kush Himalayas (HKH) and Pamir mountain tract are key yak habitat where total global yak population as reported by FAO (2003) was 14.2 million of which 93% were in China, about 0.04% in Mongolia and 0.01% in Gilgit-Baltistan.



III-Importance of Yak

- Dairy Products (Milk, Butter, Chees, Yogurt etc)
- Yak hair Sharma Carpets
- Yak blood can be used to produce high quality plasma and insulin.
- Yak horns, hooves and internal organs can be used to produce medicines

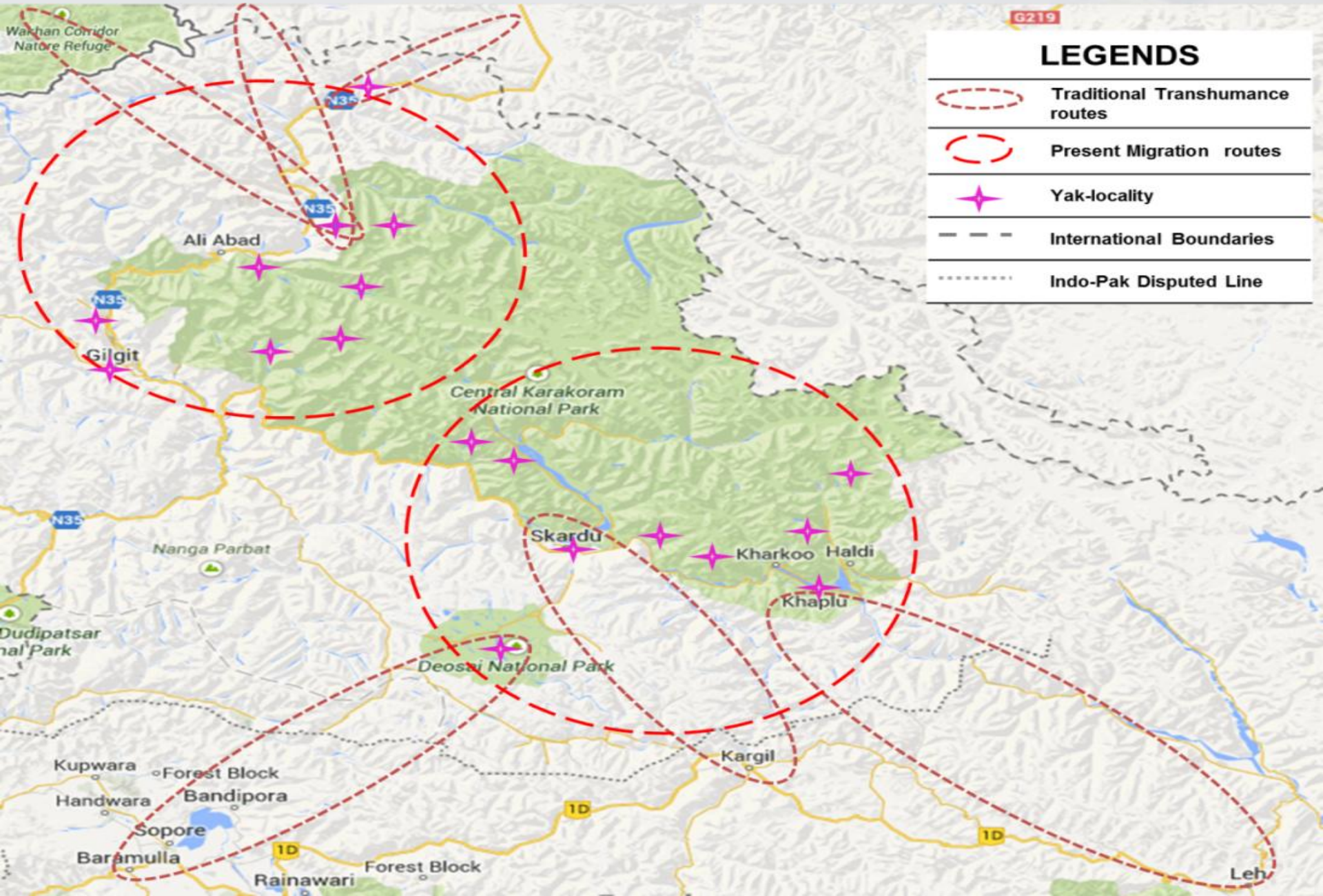


Yak meat

- Yak meat is very juicy due to its high percentages of Omega 3 oils
- Yak meat remains higher in protein, solids, minerals, and vitamins than beef; while scoring much lower in saturated fats, cholesterol, triglycerides, and calories than beef
- Wild yak produces 1,000 more meat than domesticated yak



IV- Pre Partition Grazing Routes



V-Post Partition Routes

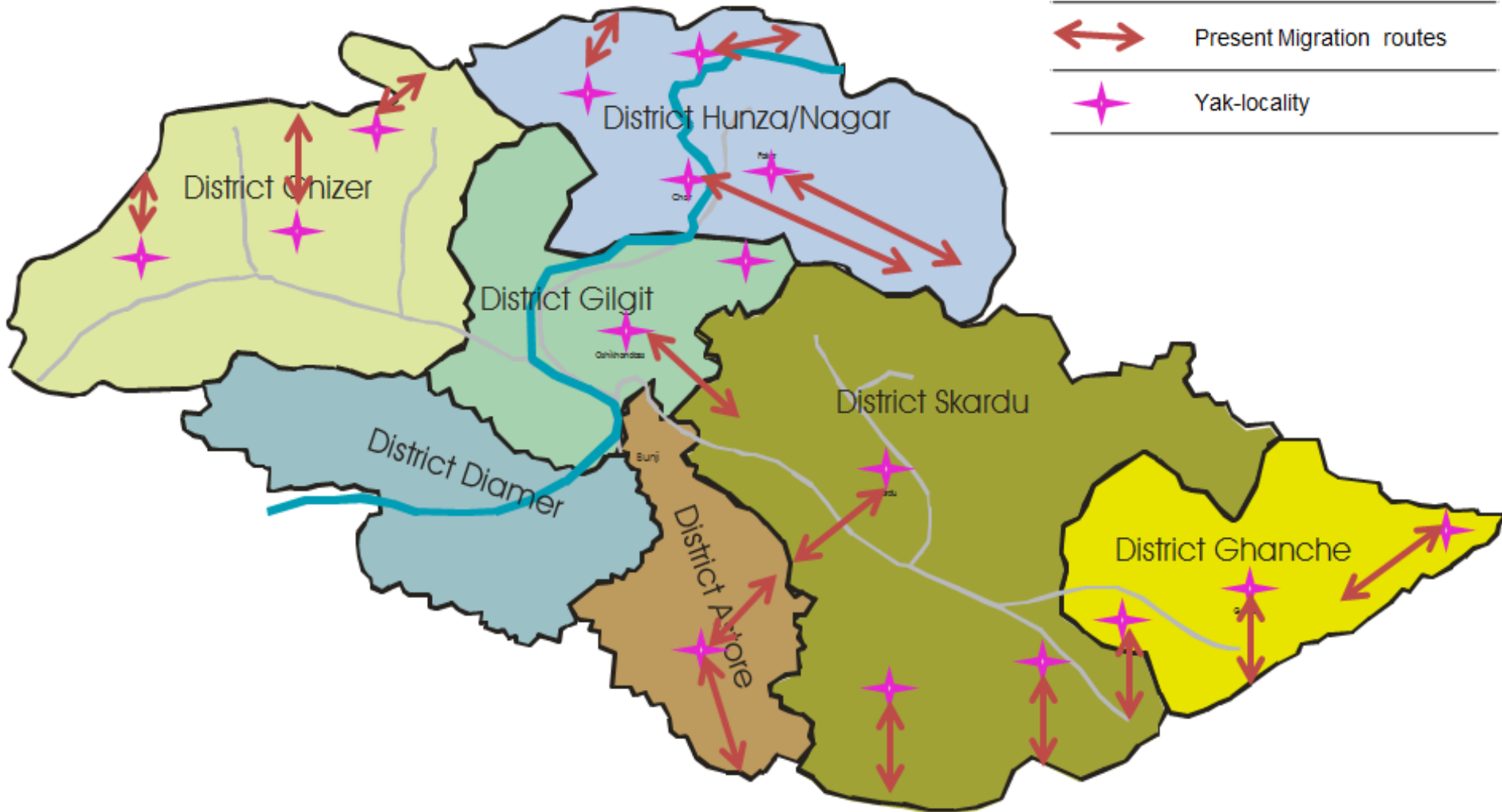
LEGENDS



Present Migration routes

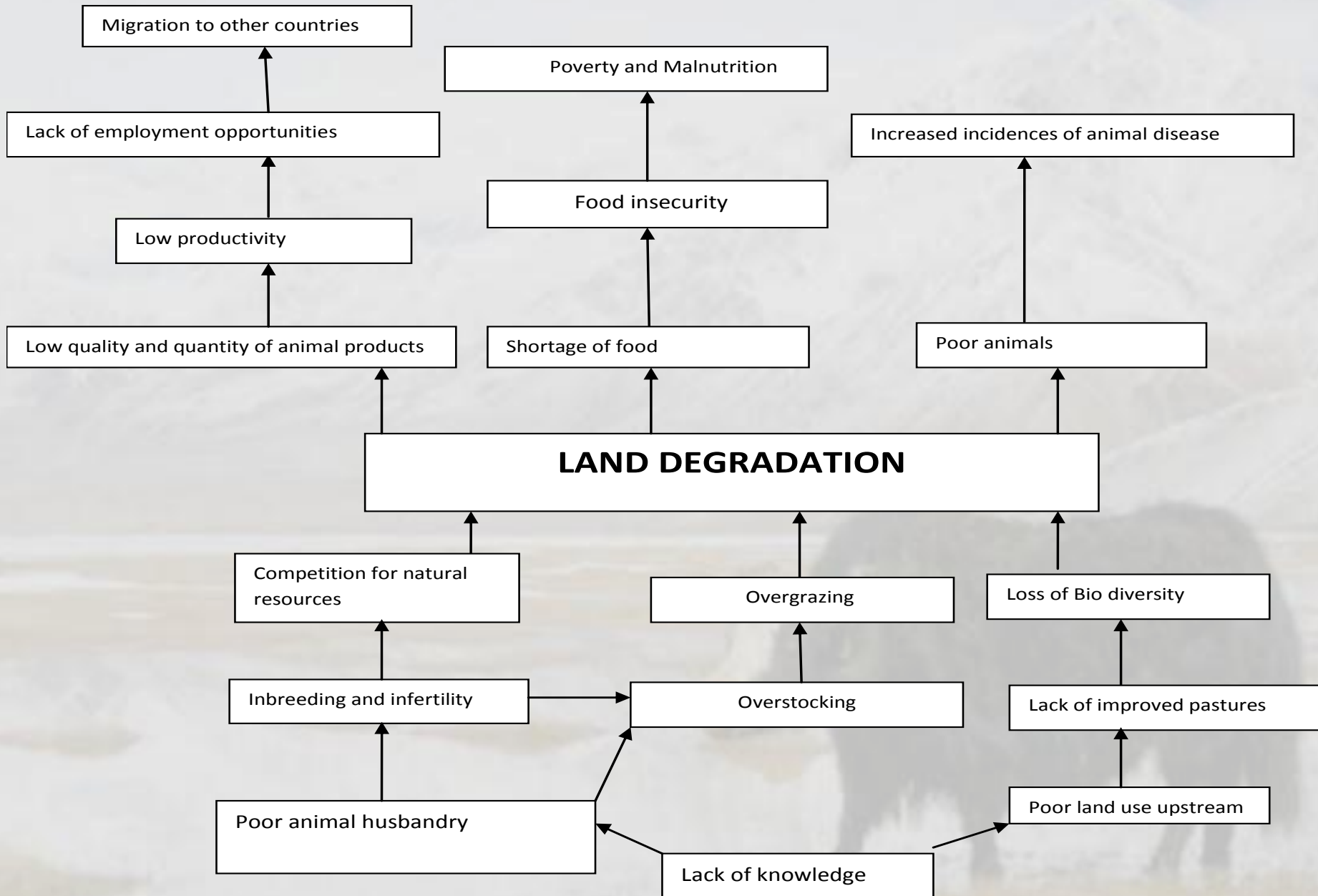


Yak-locality



Post partition Yak Herding Mechanism in Gilgit-Baltistan

PROBLEM TREE ANALYSIS



Strength Weakness Opportunities and Threats (SWOT) ANALYSIS

STRENGTHS

- Local structures/social organization
- Sharing of roles and responsibility
- Hardworking spirit of the people
- International Aid organizations
- Availability of natural resources
- Cultural values
-

WEAKNESS

- Lack of written policy governing use of resources
- Limited capacity
- Poverty
- Lack of power to stop outsiders
- Limited institutions
- Limited infrastructure
- Low level of education

OPPORTUNITIES

- Wide range of stakeholders with interest on project
- Creation of employment opportunities
- Creation of assets and infrastructure
- Support from national government

THREATS

- Donors pulling out
- Out - migrants to other areas
- Deforestation/ destruction of mangrove forest
- Overfishing and overexploitation of fish resources
- Invasion and civil unrest
- Theft

VI- Goal

Poverty reduction through Promoting sustainable yak herding, watershed management and biodiversity conservation



VII- Objectives

1. To promote restoration of degraded land and preservation of natural resources by using watershed management approach
2. To conserve the original breed of yak population
3. To initiate policy dialogue between authorities of China and Pakistan in order to promote Transboundary collaboration between communities of both countries
4. To create alternative livelihood options for the local communities

Component 1: Restoration and Preservation

- **Outcome:** Restored natural land
- **Activities:**
 1. Consultation with local stakeholders in Gilgit Baltistan
 - organization of meetings between the local communities and regional state authorities
 2. Formation of participatory watershed management committee and development of watershed management plan
 3. Facilitation in implementation of watershed management plan;
 - Capacity building
 - Tree planting
 - Gully reclamation
 - Terracing
 - Rotational grazing

Component 2: Conservation of Yak Breed

- **Outcome:** Original yak breed conserved
- **Activities:**
 1. Import breeding male yak or semen for coping the genetic make- up from China
 2. Improvement in Infrastructure of local livestock department in Gilgit Baltistan
 3. Development and maintenance of yak semen banking at Gilgit Baltistan
 4. Improvement of skills of animal breeders working in livestock department

Component 3: Transboundary collaboration

- **Outcome:** Improved institutional collaboration between China and Pakistan
- **Activities:**
 1. ICIMOD facilitate bilateral dialogue between Pakistan and China
 2. Formation of joint implementation committee
 3. Review and amendment of existing policy
 4. MOU between two countries

Component 4: Livelihood opportunities

- **Outcome:** Increased employment opportunities and decreased migration
- **Activities:**
 1. Construction of small scale slaughter house
 2. Skill development of youth on operating and maintenance of slaughter house
 3. Proper Packaging and storage
 4. Halal certification
 5. Linkage of farmers with international markets

Contd...

6. Development of small scale carpet factory

7. Skill development of youth especially females on operating and maintenance of carpet factory

8. Proper Packaging

9. Linkage of manufacturers with national and international markets



Budget

PROJECT BUDGET			
Activity	Donor requested	Own contribution	Total
1. Project Personnel (Project Leader+2 Consultants+ Financial officer+ 2 Social mobilisers)	120 000	16 000	136 000
2. Consultation with local stakeholders and training	60 000	40 000	100 000
3. Facilitation of a Watershed Management Plan	100 000	40 000	140 000
4. Yak breed conservation	150 000	50 000	200 000
5. Transboundary collaboration	20 000	30 000	50 000
6. Construction of a small slaughter house	1 200 000	300 000	1 500 000
7. Construction of a small carpet factory	1 000 000	100 000	
7. Skill development and certification	20 000	20 000	40 000
8. Miscellaneous	83 500		
9. Monitoring and audit	20 000		
TOTAL	2 753 500	596 000	3 349 500

Project Management Team

- Project Leader
- Consultants (2)
- Administrator (1)
- Finance Officer (1)
- Social Mobilizer (2)



Stakeholders

S.No.	Stakeholders	Interest	Role in project	Competency and Capacity
01.	Ministry of National Food Security and Research, Pakistan	Federal Level recognition of project	Bilateral dialogues between Pakistan and China	Federal Body
02.	Livestock Department, Gilgit Baltistan	Capacity building of department	Development of Semen Bank	
03.	Livestock, Environment and Development Department, China	International collaboration	Training and capacity building of local staff in livestock department of GB	Trained experts
04.	ICIMOD	Mandate: Well being of mountain communities	Facilitate and establish platform for bilateral dialogues	Working in all HKH region and have secretariat in China
05.	Local Community Organizations	Livelihood opportunity	To help create awareness among local farmers	Communities trust and support
06.	Watershed Management Committee	Solution to problems	Sustainable management of project	Trained community members
07.	Pakistan Federation of Commerce and Industries	Support to local communities	Build linkages in international market	Linkages with international

Sustainability of the project

- **Community & Stakeholders Engagement, Ownership and Institutionalization** - Participatory Management Committee formation for watershed management, slaughter house and carpet factory
- **Economical**- Value chain establishment for certified “*Halal*” meat and “*Sharma*” carpet
- **Technical**- Capacity development of the local youths that avoids out migration- Technical
- **Financial management**- Agro-cooperative of herders for managing their finance (savings, profit distribution, group investment, loans)-
- **Policy level**- Policy amendment for transboundary issues

Monitoring framework

<i>Objectives</i>	<i>Indicators</i>	<i>Method of data collection</i>
1. To promote restoration of degraded land and preservation of natural resources by using watershed management approach	<p><i>i. 70% of available pastureland restored by 2year</i></p> <p><i>ii. At least 7 meetings conducted by 6 months of project inception</i></p> <p><i>iii. At least 50,000 tree saplings grown by end of the project</i></p>	<p><i>Quadrante sampling, Interview with concerned stakeholders</i></p>
2. To conserve the original breed of yak population	<p><i>i. At least 5 livestock breeders trained by 1st year of project</i></p> <p><i>ii. At least 300 samples of semen conserved in a bank by 11nd year of project</i></p> <p><i>iii. Improved lab in livestock division by 1st year</i></p>	<p><i>Interview, Observation</i></p>

Monitoring framework

<i>Objectives</i>	<i>Indicators</i>	<i>Method of data collection</i>
3. To initiate policy dialogue between authorities of China and Pakistan in order to promote Transboundary collaboration between communities of both countries	<ul style="list-style-type: none"> <i>i. At least 3 Policy dialogue meetings conducted</i> <i>ii. .Implementation committee formed</i> <i>iii. MOU drafted</i> 	<p><i>Interview and document review</i></p> <p><i>Review the documents (meeting minutes)</i></p>
4. To create alternative livelihood options for the local communities	<ul style="list-style-type: none"> <i>i. At least 50% youth out of which 20% female will be trained by end of 1st year</i> <i>ii. Documentation and registration for Halal certification</i> <i>iii. At least 2 international market linkage established by the IIIrd year</i> 	<p><i>Interview of participants, Document review (Business documents)</i></p>

Conclusion/Way forward

- The team is convinced that with the implementation of this project we shall contribute to the improvement of the living standard of the local community of the Gilgit- Baltistan region.



Thank You

