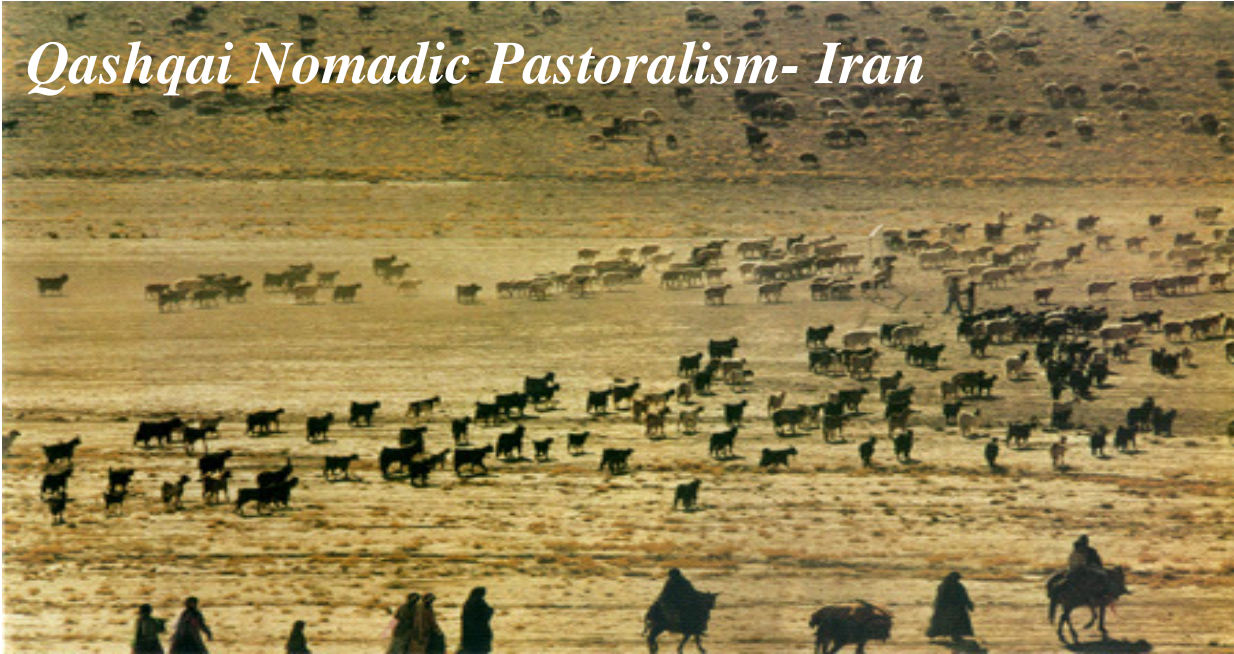


# *Qashqai Nomadic Pastoralism- Iran*



## **Proposal for the Globally Ingenious Agricultural Heritage Systems (GIAHS)**

### **Summary Information**

<b>Country and Location</b>	The Zagros Mountain Range in Central-Western Iran
<b>Project Title/ Name of the System</b>	Mobile Pastoralism in Iran—Traditional Resource Management Practices of the Qashqai
<b>Funding Requested</b>	
<b>Requesting Agency</b>	Centre for Sustainable Development (CENESTA) 5 Lakpour Lane, Suite 24, Langary Street, IR-16936, Tehran, Iran Tel: +98 21 2964114/5/6 Fax: +98 21 295-4217
<b>Government Counterparts &amp; Other Partners</b>	Organisation of Nomadic Peoples Affairs (ONPA); Department of the Environment (DoE), Kuhi People's Council of Elders; World Alliance of Mobile Indigenous Peoples (WAMIP); IUCN-Commission on Environmental, Economic and Social Policy (CEESP) Working Group on Sustainable Livelihoods (WGSL); International Institute for Environment and Development (IIED)

#### **Summary**

The following is a proposal to protect the ingenious land and resource management system of the Qashqai nomadic pastoralists of Iran, while promoting cultural integrity, conservation of agro-biodiversity, and sustainable livelihoods among a sub-tribe of the Qashqai.

Pastoral communities have always played an important role in Iran. Iran lies in the confluence of various ecotypes and has a rich tradition of mobile pastoralism, both of which are currently under threat. In an arid environment such as Iran's, pastoralists have developed creative and opportunistic adaptive resource management systems for the use of scarce natural resources. Migration is the foundation of their strategies; their mobility ensures that natural resources are not used to the point of exhaustion and eventual extermination. Their herds browse the vegetation, stomp the soil, transport seeds of wild species, and fertilise the land, all of which benefit the rangeland while promoting biodiversity. Mobile pastoralists have learned to conserve rangelands through sophisticated techniques embedded in complex social and cultural institutions.

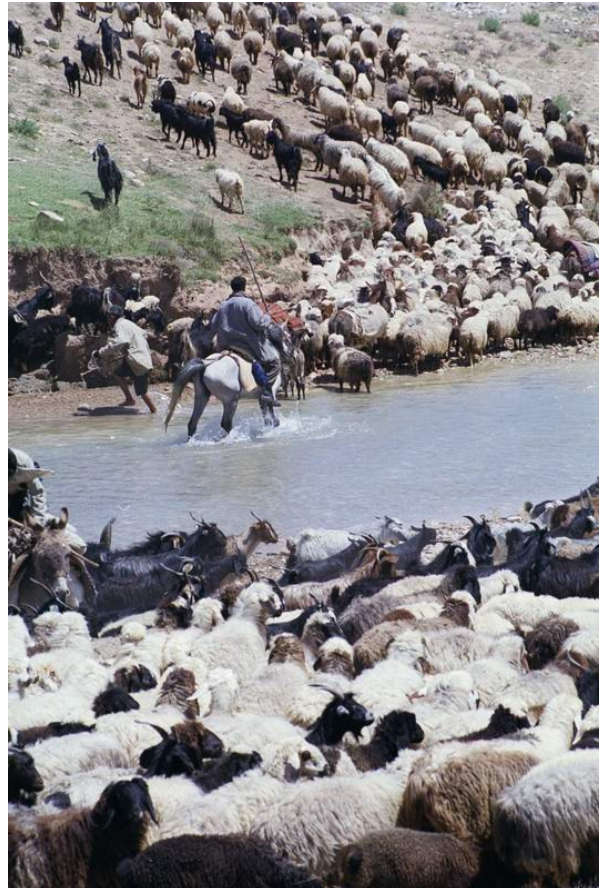
Over recent decades, Iran's pastoralists have been experiencing changes due to external pressures that have altered the social, political, and economic landscapes, and have also been the cause of decline in the health of rangelands and their biodiversity. The aim of this project is to work with a sub-tribe of the Qashqai nomadic pastoralists to revitalise their traditional social organization and culture; promote collaborative management and community management of ecosystem health and biodiversity, and to prepare the way for adaptive replication of the revitalisation model to other mobile pastoral peoples.

## Description of the System

### Description of GIAHS

More than ninety percent of Iran's surface area of 1.6 million km<sup>2</sup> is made up of arid and semi-arid lands. Most of this consists of rangelands, largely inhabited, cared for, and used sustainably by the mobile pastoralists of the country until recent government and other external influences began to upset their dynamic equilibrium with the natural resources on which they depend. Mobile pastoralism is a way of life and form of land use that is ideally suited to arid and semi-arid lands with topographical variations that are prevalent in Iran. Arid lands are characterized by high variability in amount and location of precipitation, as well as intolerance of persistent sedentarised and localized intensive use. Scientists now describe such systems as non-equilibrium dynamic ecosystems. In Iran where periodic severe droughts are a common characteristic of the landscape, the productivity of much of the land is low. The amount, timing, and distribution of rainfall across the landscape are varied, and there are very large differences in climate between seasons in any one area. Much of the landscape is therefore unsuitable for irrigated agriculture or settled pastoralism.

Uncertainty in the environment has given rise to an opportunistic adaptive management system practiced by the Qashqai nomadic pastoralists of Iran. The mode of land use and management system of the Qashqai is transhumant.<sup>1</sup> Mobility has been a way of life for the Qashqai for centuries. In arid lands, mobility exploits climatic uncertainty, while in the process preserves productivity of the land by avoiding resource



<sup>1</sup> Nomadic as a specific term generally refers to irregular movement depending on exploitation of climatic or other uncertainty. Transhumance in the English (rather than French) usage refers to regular migration between seasonal grazing areas. The timing of migration and intensity of resource exploitation under transhumance is still dependent on climatic and other uncertainty. Nomadism as a general term has been denigrated as “random” land use, when in fact it is an extremely sophisticated response to difficult and unpredictable environmental conditions, relying upon intimate knowledge of natural systems.



depletion.

The Qashqai have developed very sophisticated systems to cope with seasonal variation such as droughts and rainfall, including flexible marketing decisions—based on the expected condition and carrying capacity of the rangelands during the coming season.

Despite the aridity of the landscape, there are pockets of very high biological diversity that have traditionally been managed sustainably and have been protected by the Qashqai nomads from exploitation by outside non-pastoralist groups. These pockets of life serve as a critical resource for the Qashqais' overall resource management system. For example, the rangelands of Iran contain a very high diversity of plants. Much of that plant diversity is unpalatable to humans but palatable to wildlife and livestock, particularly indigenous breeds of livestock that have been cultivated by the Qashqai nomads over thousands of years.

Intimate dependence on the land for survival has led to skilled means for perpetuating the health of the land. Traditional social organisations established clear rights of access and control over use of natural resources. There are clear and strong defence of traditional lands from access to outside groups, and accompanying protection of resource-base from excessive exploitation especially by unsustainable agriculture. Traditional social rules prescribe intensity of land use regardless to some extent of human population growth. Furthermore, the Qashqai pastoralists have a strong feeling of spiritual connection with the land and hence strong feelings of responsibility for sound management of the land.

## Goods and Services Provided by the System

### Livelihood services

Traditionally, Qashqai nomadic pastoralists have kept a variety of indigenous domestic animals, especially large herds of sheep and goats as well as transport animals like camels, horses and donkeys. It is estimated that the mobile pastoral peoples in Iran—although constituting about 2% of the population—are producing about 1/3 of the country's need in livestock products. Among other things, the Qashqai are producers of meat, dairy products, varieties of wool, and unique types of traditional carpets (such as gabbeh carpets). During migrations, the tribes trade their live animals, wool, hair, hides, dairy products, and various knotted and woven textiles with villagers and townspeople in return for manufactured and agricultural goods. This economic interdependence between the mobile and settled populations of Iran has been an important characteristic of society for several centuries. Globally too many of these products, especially the handicrafts of the Qashqai, are highly valued and desired around the world.



Over the past 40-50 years however, unsustainable government policies have favoured the intrusion of market-oriented production systems that are frequently out of the control of the pastoralists. Consequently, emphasis is placed on short-term gains rather than optimisation of sustainable use. For example, the flock composition of the Qashqai has changed in that there is now a tendency toward meat rather than dairy producing varieties of livestock. The diversity of means of the Qashqai livelihoods and production of meat, milk, hides, wool, handicrafts, hunting, harvesting of native plants, fruits and herbs, is a direct reflection of their resource management practices.

## Environmental services

Mobile pastoralist range-management systems are among those most compatible with biodiversity conservation. Livestock stomping, gentle ploughing, browsing, seed spreading and deposition of manure while grazing and along migration routes serve to maintain rangeland productivity and biodiversity. The removal or drastic reduction of grazing often results not only in lower productivity over the long term, but also in a landscape dominated by shrubs and with significantly lower biodiversity.



**A community conserved wetland**  
in the summering grounds of the Kuhi

The highly diverse vegetation of the rangelands of Iran has evolved together with the livestock and land management systems of the pastoralists. Wildlife has also evolved side by side with nomadism. Mobile pastoralists describe how throughout time, flocks of livestock and herds of wild ungulates have grazed side by side, and speak of “the brotherhood of livestock and wildlife,” which, they claim, has been weakened as a result of government interventions and intrusion by sedentary people. The sophisticated techniques of using scouting and early warning systems to predict droughts, take preventive measures, and adopt coping strategies are well known among the Qashqai nomadic pastoralists. Over time, the Qashqai have developed irreplaceable techniques of habitat management and rangeland rehabilitation for maintaining the diversity of the bio-ecological systems. In times of migration, scouts moved ahead of migratory groups to collect information on the conditions of the destination rangelands. This information is used to regulate the size of flocks to migrate, the number of tent-holds of people who can move along, and the dates of entry and length of grazing period in each territory. The mobile pastoralists, therefore, have a traditional system of dynamic assessment of carrying capacity of rangelands.

Most Qashqais know the name and properties of every single botanical species on the rangelands and can give long descriptions of their medicinal, food, feed and industrial properties for animals and people, as well as their place in the ecosystem. Under the indigenous management systems of the Qashqai, the cutting of living trees, other than in extreme need and with sustainable use in mind, is prohibited and considered a sin. Sustainable use of non-timber products (gums, medicinal and veterinary plants, vegetable dyes, mushrooms and other edible herbs and fruits) are relied on for subsistence and only occasional commerce. The Qashqais’ sustainable hunting practices have preserved wildlife for centuries. Adaptive methods for capturing and storing water in drylands while maintaining springs and water holes for their livestock, has also affectively provided water for wildlife





## Threats and Challenges



The forced sedentarisation of the Qashqai began in 1925 when Reza Pahlavi ascended to the throne through a foreign-supported coup d'état. The policies of his son, the Shah, were even more damaging beginning with the land reform of 1963. Prior to 1963, the Qashqai communities used common property management systems. The land reform programme of the Shah brought about the nationalisation of all natural resources, including rangelands, forests, water and wildlife, and alienated the Qashqai from their common property land and customary rights. Individuals were granted use of land based on a specific short-term grazing licensing system which was centred on a state expert assessment of the carrying capacity of the range. The assumptions on which this capacity was based have now been shown to be fundamentally flawed. But this system of issuing individual short term permits still persists, and means that the Qashqai are less able to work together to apply the principles of sustainable use. This system has further marginalised the Qashqai communities by fragmenting and destroying their summering and wintering pastures, and impinging on their migratory routes.

Today, many of the policies of the Iranian government related to the Qashqai regard pastoralism as threats to development or security. These policies are leading to programmes of sedentarisation while adopting now-outmoded Western “scientific” land management schemes. Such policies have caused the removal of many of the Qashqai from the land and have greatly intensified exploitation of the rangelands. Land suitable for cultivation is often distributed to private investors or the politically connected, relegating remaining pastoralism to reduced and marginal areas.

The results have been loss of mobile peoples' access to their traditional lands, erosion of cultures and creation of social distress, fragmentation of ecosystems by roads, sedentary agriculture and industrial development unrelated to local needs, and degradation of lands under cultivation as well as those under “protected” status. For example, in Iran high-grade rangelands have currently fallen to 9.3 million hectares, less than half the figure in 1963 when efforts to remove nomads from the land began under “land reform”. Sadly, mobile pastoralists have been blamed both for the failure of efforts to sedentarise them as well as for the degradation of the reduced land made available to them. Sedentarisation and the encroachment of the outside world have forced many of the Qashqai to abandon the ecological needs of the land. Consequently, the nationalisation of land has tended to seriously weaken the incentives for proper management and sustainable use of the land.

## Policy and Development Relevance

Social scientists as well as biologists and resource managers have begun to recognize over the last several decades the error of forced sedentarisation of mobile peoples, and the damage done both in social and biological spheres. After eight decades of top down policies that have resulted in the gradual marginalisation and impoverishment of the mobile pastoralists of Iran, there is presently momentum growing among non-governmental organizations and even some government agencies, to encourage the persistence and restoration of mobile pastoralism.

An intensive programme to document and expose policy makers to the benefits of mobile pastoralism for range management and biodiversity conservation will help promote the development of new policies in support of mobile pastoralism, and will weaken the pressures for sedentarisation and inappropriate land conversion.

## Global Importance

Communities such as the Qashqai peoples who are adapted to non-equilibrium arid and semi-arid ecosystems are reservoirs of knowledge and experience for the rest of the world. The use of such knowledge can be critical to the adaptation of other areas of the globe to increasing aridity and variability in climatic conditions accompanying global warming. The Qashqai have many innovations that could be useful to communities living in increasingly arid or unpredictable lands, including water harvesting techniques, underground



water storage and transport, flexible livestock stocking practices, and opportunistic and adaptive range exploitation. The Qashqai are one of the prime examples of vertically migrating mobile pastoralists in the world. The Qashqai, as well as other mobile pastoralists of Iran, can offer their extensive traditional and indigenous knowledge of processing and preservation of a huge variety of dairy products (reaching over 30 types in some tribes) to other pastoralists such as those in the Sudano-Sahelian region and other mobile pastoralist parts of Africa and elsewhere who lack such techniques. This could be a great help to averting famines and better nutrition in the dry season in such places.

## Justification of candidature according to the Criteria for GIAHS Selection

### *Systems criteria*

#### 1. Systems ingenuity and remarkability

The Qashqai of Iran use a system of opportunistic management that has evolved over centuries of dependence on a varied and unpredictable landscape. Their system is remarkable for its flexibility in stocking levels and herd movements in relation to environmental change, as well as for other innovations such as collecting and using livestock in spreading seeds of desirable native plant species. This system has resulted in greater livelihood security and resilience to severe disturbance than would be possible under conventional sedentary range management practices.

#### 2. Outstanding characteristics

Outstanding characteristics of the Qashqai management system are transhumant patterns of mobility, scouting of pastures ahead of seasonal migration, flexible stocking levels based on rainfall and expected vegetation production, marketing of multiple products from livestock including highly prized handicrafts, and a philosophy that places a high value on biodiversity protection.

### 3. Proved history of sustainability

The Qashqai system was developed over centuries in response to varied and unpredictable environmental conditions. The continuity of the mobile way of life of the Qashqai, and their ability to thrive under such conditions, is a testament to the sustainability of this way of life. Even through eight decades of concerted government efforts to disrupt tribal organization, change their land management practices and sedentarise their people, the Qashqai have maintained the integrity of their land management system, preserved in the knowledge of elders and continued practices of the tribe.

### 4. Global significance

The Qashqai and other mobile tribes have suffered from hostile government policies throughout the Central and West Asia and Africa for many decades. As governments and scientists come to appreciate the unique positive attributes of their ways of life and land management practices, urgent efforts must be made to save the remnants of such systems. The Qashqai are also one of the few remaining mobile groups in the Middle East. Offering support for the Qashqai people is important not just for Iran, but for the rest of the world, because global warming is likely to increase the prevalence of environmental conditions under which the Qashqai system developed. Humanity will increasingly need to study and learn lessons from successful adaptations to unpredictability in natural systems. Their experience of revitalisation is also important for the other nearly two hundred million pastoral nomads in the world. The fact that WAMIP (World Alliance of Mobile Indigenous Peoples) is a partner in this project will help in exchanging and spreading the experience elsewhere in the world.

### *Contextual criteria*

#### 5. Representation

CENESTA has been working with the Kuhi sub-tribe of the Qashqai for the past two years. The proposed project within GIAHS centres first on the Kuhi sub-tribe of the Qashqai, but is intended to expand to other sub-tribes of the Qashqai as time and funding allow, with the direct assistance of Kuhi elders. All activities with the Qashqai are and will be fully participatory, driven by the needs and desires of the Qashqai themselves and focused on building their capacities. The Kuhi subtribe is a major partner of this project.

#### 6. External threats

Threats to the Qashqai way of life include fragmentation of traditional migratory routes and grazing lands from municipal and industrial infrastructure, settled agriculture, and other competing land uses; continued government policies of promoting sedentarisation, imposing imported outmoded livestock management systems on nomads, and denigration of the mobile way of life in the educational system; and exposure of the Qashqai to modern, westernized Iranian culture. Despite these threats, the Qashqai have shown themselves to be highly resilient, and in this there may be lessons for other mobile peoples around the world.

#### 7. Policy and development relevance

Exposure of Iranian policy makers to the beneficial contributions of the Qashqai system in the areas of livestock production, land management, and biodiversity conservation will hopefully result in development and promotion of policies that enable a continuation of traditional mobile ways of life and a termination of harmful policies of induced sedentarisation. This would result in increased livelihood security, more effective land management for livestock production and conservation, and preservation of a unique and valuable agro-cultural heritage.

### *Project implementation criteria*

#### 8. Project integration: country eligibility and country driven-ness

Iran is a signatory to both the CBD and the UNCCD, and is therefore eligible for the GIAHS. The project is supported by the Kuhi sub-tribe of the Qashqai tribe, as well as regional and national representatives of the Organisation for Nomadic Pastoralist Affairs (ONPA) within the Ministry of Agriculture of Iran. The entire project is designed to be participatory and community-driven.

#### 9. Co-finance potential

CENESTA currently has an IIED-funded project with the Qashqai to revitalize the traditional social organization of the Qashqai tribe, and there are several other CENESTA and IUCN joint proposals for funding, both submitted and in development, for projects to research and document Qashqai land management practices and the dynamics of the ecosystem on which they depend.



## 10. Project approach

This criterion has five main elements:

### a. Potentially contribute to all project goals (recognition, conservation, and sustainable management)

This project will promote the mobility of the Qashqai as a sustainable livelihoods and biodiversity conservation strategy.

The project will seek to:

- bring attention to the unique and effective traditional resource management strategies of the Qashqai, which are well-adapted to their challenging and variable environment;
- strengthen and revitalise their indigenous social structures, social cohesiveness, and cultural integrity;
- promote increased awareness of the unique Qashqai culture, including their production of a variety of indigenous breeds of animals, dairy products and handicrafts,

In doing so, we hope to promote respect for the customary rights and traditional knowledge of the Qashqai. Such recognition will help to halt and possibly reverse decades of setbacks, such as land expropriation, forced sedentarisation, and legislation that have damaged not only the culture and livelihoods of the Qashqai, but also the rangelands of Iran and their biodiversity.

Through their practice of mobility, the Qashqais conserve biodiversity by acting as vectors for seed dispersal and agents of regenerative disturbance in the rangelands. Along their migratory paths, the Qashqai ensure connectivity in the landscape by interacting with different human and natural communities. We hope to promote and encourage further exchanges of agriculturally sound methods well-adapted to drylands between the Qashqais and the sedentary communities along their migratory paths.

### b. Eco-systems approach (reflect fully the GIAHS concept),

The project takes an ecosystem approach in several ways, not least of which by:

- recognising the important connections between social organisation and cohesion on the one hand, and effective conflict resolution over natural resource exploitation on the other;
- emphasising the importance of contiguity and integrity of the entire migratory path of the Kuhi sub-tribe, and their ability to practice opportunistic adaptive management over that extensive area, to sustainability of resource use and conservation of biological diversity.

### c. Contribute to international conventions: CBD, CCD, FCCC, ITPGR,

Iran is a signatory to both the CBD and the UNCCD. This project will aim at contributing to the implementation of the CBD programme of work on agricultural biodiversity and the sustainable practices of local and indigenous communities. As for contribution to the UNCCD, the Qashqai have developed an opportunistic adaptive management system well adapted to an arid environment with high climatic variability. Preservation of this system has the potential to promote sound land management in Iranian rangelands and avert land degradation leading to desertification.

### d. Build on existing initiatives, policies and experiences,

This project builds on past experiences of CENESTA and IUCN-CEESP in promoting the social organisation and cohesion of traditional Iranian pastoral groups, the relationships of trust that CENESTA has developed with the Qashqai- Kuhi sub-tribe over several years, and the existing support of IIED in this ongoing effort. It could play a significant role in affecting the balance of power in government policy-making between those who would sedentarise and “modernise” all the nomads and those who recognise their rights to self-determination and self-sufficiency. The project will examine the impact of national and international policies on pastoralists and will take the necessary local and national actions to protect the rights of the Qashqai.

### e. Participatory management / sensitivity to indigenous and community issues



The project seeks to promote mobility as a uniquely flexible and adaptive environmental management strategy and give the Qashqai community a leading voice in decision-making regarding policies, plans, and projects that affect them.

The project's main methodology is to conduct participatory research to find appropriate solutions to local problems, while empowering local communities to take charge of as much of the process of analysis, planning, implementation and evaluation as possible. Finally, we hope to foster multi-sectoral collaboration to promote dialogue and collaboration between communities and external governmental and non-governmental sectors.

## Outline of activities during project

1. Documentation of government policy toward the mobile pastoralists
2. Documentation of the environmental effects of these policies and the affects on the ability of the Qashqai to practice their traditional resource management and their culture
  - a. Conversion of pasture land to agriculture
  - b. Sedentarisation of mobile communities
  - c. Pressure on pastoralists into more marginal lands, more sensitive areas, greater intensity of use, and into areas of critical environmental importance, therefore out of a sustainable relationship with nature and into conflict with nature
3. Land use mapping
  - a. Documentation and quantification of change in 1 and 2 above, using GIS tools and satellite imagery
4. Examination of the continued viability of the traditional management systems and identification of threats and obstacles to its viability, related to:
  - a. Policy
  - b. Law
  - c. "Facts on the ground" such as fragmentation of migration routes via establishment of industrial or municipal infrastructure on nomads' traditional lands, and entrenched claims of ownership by settled agriculturalists and other competing land users e.g. mining, cement factories, oil refineries, urban expansion, etc.
5. Identification of critical threshold for viability including:
  - a. Critical extent of range (hectares)
  - b. Critical areas
  - c. Migration corridors
  - d. Critical practices
  - e. Critical social organisation
  - f. Critical legal protection and/or recognition
6. Restoration measures to enable a return to traditional resource management practices
  - a. Restoration of degraded agricultural lands
  - b. Restoration of over-grazed pasture lands
  - c. Restoration of social structures, organisations
7. Economic study comparing mobile pastoralism with sedentary pastoralism
8. Comparison of pastoralism and irrigated agriculture, focused specifically on Kuhi sub-tribe of the Qashqai.