

2014

Capacity Building of Local Communities to Conserve the Persian Leopard in the Caucasus Eco-Region



Final Report

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people's trust for
**endangered
species**



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Iranian Cheetah Society (ICS) is a non-governmental, non-profit organization committed to saving the biodiversity which is so rich, but disappearing in Iran. Carnivores have essential priority within the ICS activities and various research and conservation projects have been implemented on the species, such as Asiatic cheetah, brown bear, striped hyena, grey wolf, Eurasian lynx, caracal, mustelids and Persian leopard whose more than two third of its wild population occurs in Iran. It was established in 2001 (registration number 13640) and celebrated its first decade of biodiversity conservation recently.

To learn more about Iranian Cheetah Society (ICS)

visit: www.wildlife.ir

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Their hospitality helped us not feel like strangers in the village. They let us sit at their table and helped us experience something like having family and relatives in the village.



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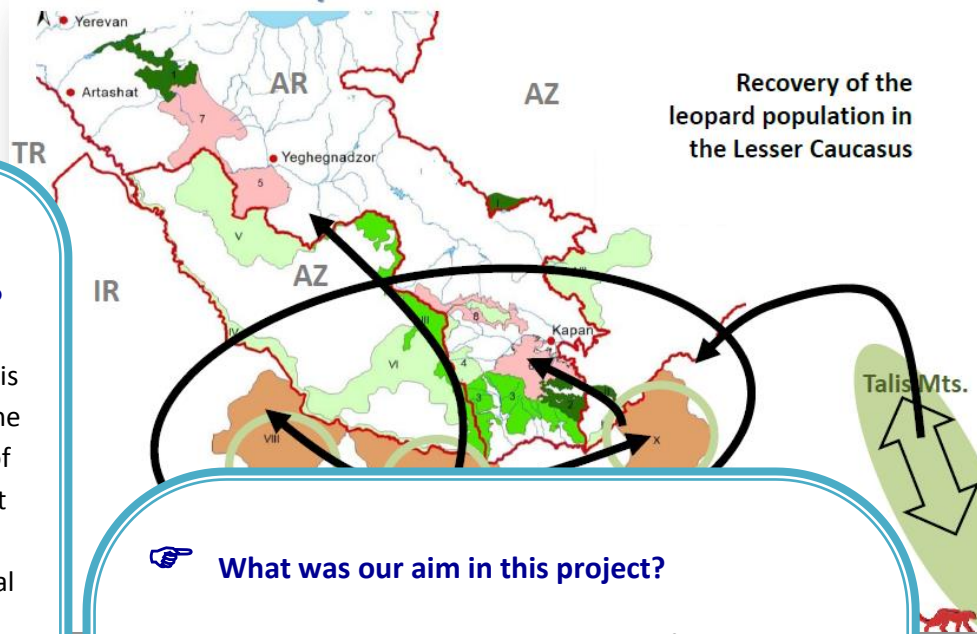
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Resources

1

Introduction



Why leopard? Why Dorfak?

Iranian leopard, the biggest cat in Iran is in danger of extinction. According to the International Union for Conservation of Nature (IUCN) report in 2008, the most important factor endangering Iranian leopard is the distance between natural habitats and their fragmentation, especially in the Caucasus. This factor leads to distance between and decrease in population of sub-species. Therefore, areas functioning as corridors connecting population are of considerable importance. The protected area of Dorfak-Deylaman in Gilan Province, where hunting is prohibited, acts as the connecting corridor and playing this transmittal role for Iranian leopard from Caucasus to Iran. In addition, the decrease in number of preys is a major issue in this area as it has resulted in leopard attacks on domestic livestock, increasing the conflict between local people and leopards. The accumulation of these factors motivated the Iranian Cheetah Society to define a project aiming to conservation of leopard in this area.

What was our aim in this project?

When the *Capacity Building in local Society for Conservation of Leopard in the Dorfak-Deylaman Protected Area, Caucasus Section Project* was defined, we were initially looking for measures to conserve leopard through education and building awareness. However, initial surveys demonstrated that the concern of leopard attacking livestock in the target villages is serious and severe, thus we decided to change the project methodology and approach. Therefore, the continuation of the project was defined by adopting a participatory approach and methodology to solve the conflict concern. In this project, we aimed to "improving capacity of the local society for management of leopard conflict." This phrase actually illustrates the transformation intended by our team in execution of the project. What our team considers "improving capacity" and why "conserving leopard" mentioned in the title is replaced with "management of leopard conflict", is something that became clear gradually and throughout the process of the project.

The conservation of leopard outlook might have been on our minds in the initial stages, but as we gradually became more exposed to the locals' analyses of their life concerns and became more familiar with the realities of their lives, this outlook was modified. We were not in the villages as leopard conservators and did not see ourselves having such mission. Our defined mission was facilitation of a collaborative process, the collaborative process of improving the local society capacity for management of leopard conflict. Therefore, we have tried to ensure that anything happening in this project be based on the different aspects of this mission: to ensure that the nature of the process of capacity building in the local community is participatory and to facilitate the management of the conflict.



Photo by: Alex Sliwa



What were our principles in this project?

1 Flexibility

We were prepared to change our plans according to circumstances and what was required for compatibility with the different and various lifestyles in the local community.

2

Inclusiveness

We aimed to connect to and include all the locals in the project (families in different socioeconomic classes, people living in different geographical locations, people in different age groups, etc.). We were constantly on the lookout to meet and establish a relationship with people we might not have met before or who might have been less exposed to the project.

3

Process-orientation

Process-orientation for us meant that each stage would be shaped according to a lead from the previous stage, i.e. the tasks and activities would not be impulsive and would be on the basis of previous stages. In addition, merely reaching a conclusion and outcome was not important in this project, but what was important was *the process* of reaching the outcomes. We envisaged capacity building as fundamentally process-oriented rather than a collection of tangible and physical outcomes.

5

Transparency

The process taking place in the village was carried out in a way to be reportable to the locals. We tried to make this process transparent for everybody and inform everybody on it. In other words, nothing happening in the village was hidden from anybody.

4

Reflection

For us, reflection was a pivotal principle as we believed no process could take place without reflecting and actually reflecting is an inseparable part of process-orientation. This means that the tasks and activities do not follow a linear path, as we continually go back and evaluate them. So the results of this evaluation would affect the plans for the next stages.

6

Sustainability

Sustainability to us meant that the tasks and activities be shaped by the prioritised concerns and potentials of the local community, and be less dependent on outside resources. We insisted that the different stages of the project be carried out with or by individuals belonging to the local community and whose life and livelihood was most connected to that part of the work. Subsequently, our hopes that the process could survive and continue after us leaving the village would increase.

7

Hand over

From the beginning we considered the locals as the owners of the project and we were careful to gradually hand over the project to them. We tried to maintain our position as facilitators and not the decision makers and owners of the project.

8

Seeking and Respecting Diversity

We were aware that because of the diversity in the lifestyles and means of people's livelihood, we cannot/should not aim to reach a single prescription for everybody. Therefore, we tried to understand the variety and difference in the local community seek it and provide the opportunity for this diversity and difference to be emerged in the project.



What you see in this report?

What is included in the current report is the explanation of the process taking shape through two years. We hope that the report could illustrate different aspects of this project.

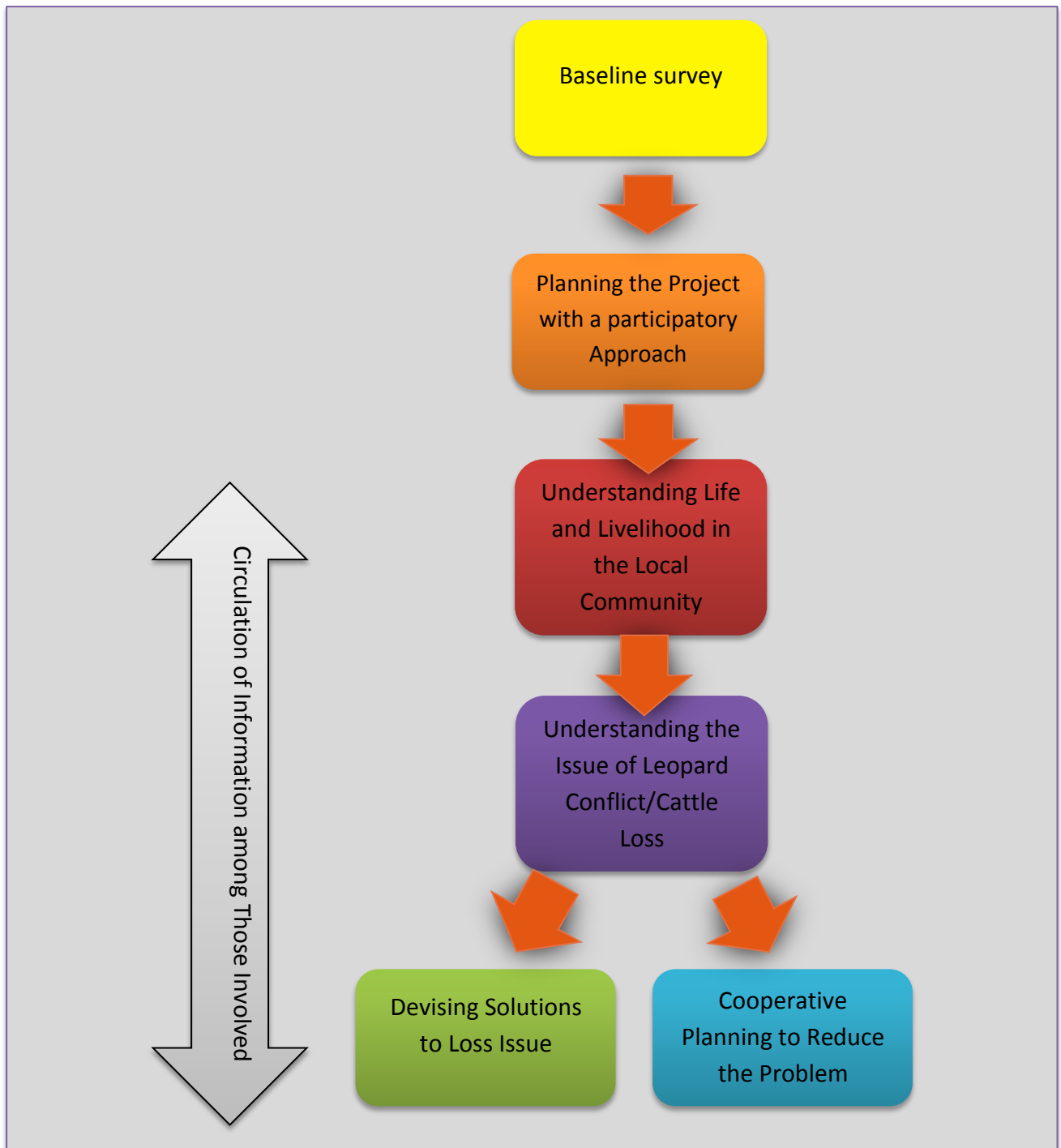
- Project at a Glance, in order to see different stages of the project, a visual report and timeline has been presented at the beginning of the report.
- In the first chapter, the activities that took place during the project have been narrated. This narrative actually represents the various processes that led to and took their leads from each other, consequently and iteratively forming the main body of the project. Analysis of the issue of leopard attacking cattle and the root causes of cattle loss are issues narrated besides the formation and progress of joint meetings.
- The project outputs and outcomes as well as a discussion of their sustainability have been presented in a separate chapter. In addition, the opportunities and leads found due to the project have been discussed in this chapter.
- As the experience accumulated in this project could be useful for our team or other institutions interested in working in this field in the future, a chapter on the lessons has been presented where we discuss the lessons learnt and experiences gained by us. In addition, the challenges and obstacles faced during the project are discussed in this chapter.
- At the end, the resources used to carry out this project could be seen.

2

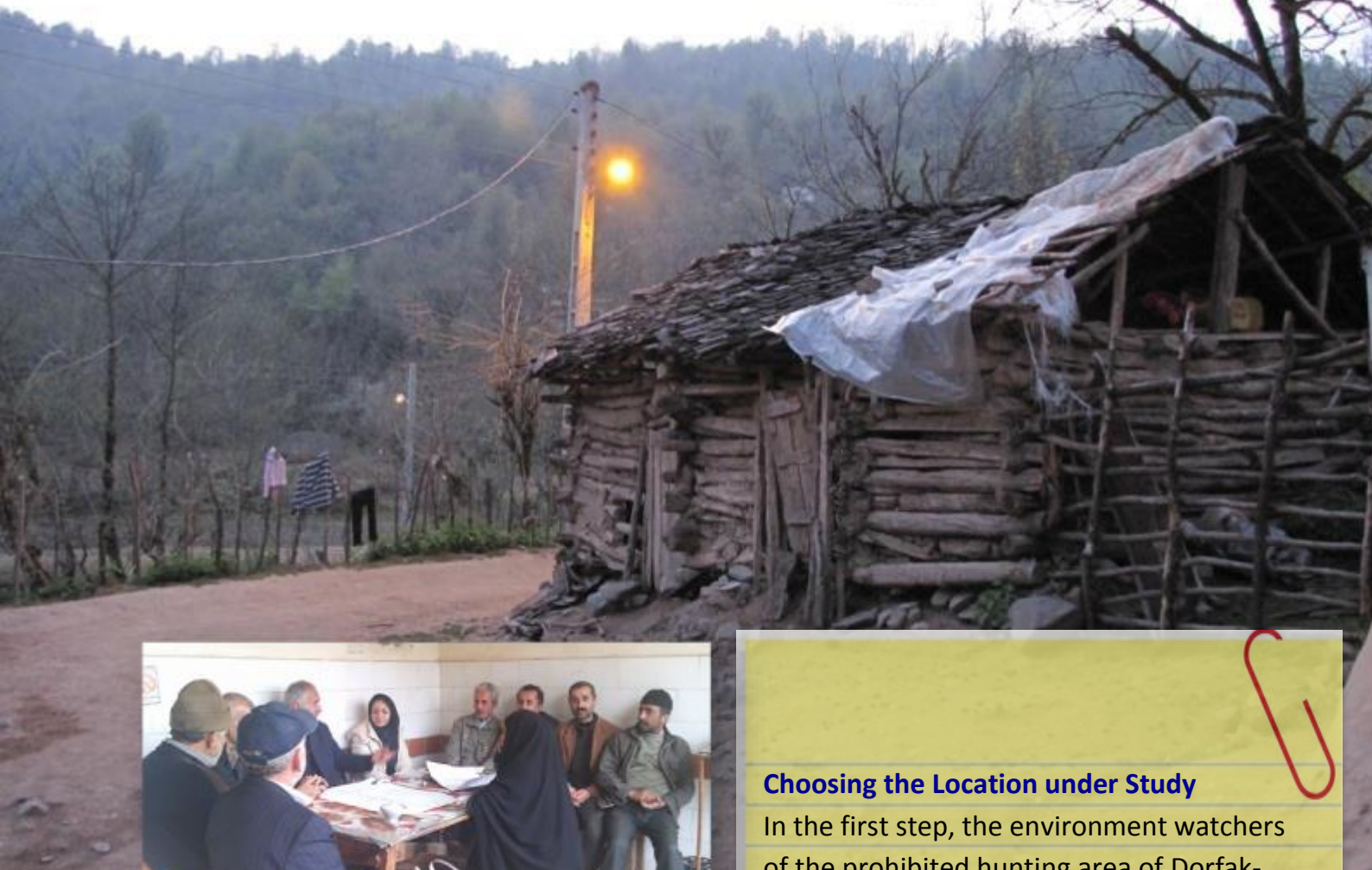
Project at a glance

Introducing Project Phases

In this chapter, the aim has been to visually report the different activities carried out during the two years of running of the project as well as to present a timeline of activities. This could help the readers understand the project as a whole while considering its different phases and how their running parallel or sequential to each other has shaped the course of the project.



Baseline survey



Choosing the Location under Study

In the first step, the environment watchers of the prohibited hunting area of Dorfak-Deylaman were consulted. Accordingly, eight villages were chosen for carrying out the questionnaire.

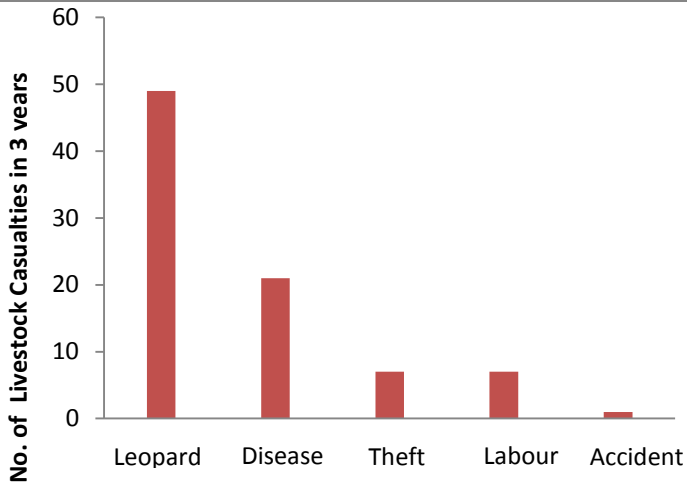
Questionnaire Survey

Sixty-six families from the chosen villages were interviewed on the questionnaire. In these interviews primary information was gathered on the cattle casualties as a result of leopard attacks and other threatening factors. The knowledge and attitude of the local people towards leopard and its conservation was also assessed.

Choosing the Target Villages for the Project

From the villages calibrated, the three villages of Gavcoul, Gilbaam and Chelgacheh were chosen as target villages.

Project Planning with Participatory Approach



Choosing Participatory Approach as the Project Methodology

The findings of calibration of the questionnaire demonstrated that leopard causes the most damage to livestock in this area. Accordingly, this issue has caused conflict between humans and leopards in target villages. Therefore, solutions appropriate to life and livelihood conditions of the local people. This is why a participatory approach was chosen for the continuation of the project.

Project Planning on the basis of Participatory Approach

Initially, the project was planned by the executive team. In this plan "improving capacity of the local community for management of leopard conflict" was stated as the transformation the project aims to achieve. Subsequent to defining the clients and actors expected to play a role in materialisation of this transformation, required activities required to achieve it were defined. In project planning it was envisaged that with the unfolding of the process the local people would become the owners of the project.



Team Building/ Preparing the Team

The project team needed to be prepared and compatible with the participatory approach. To this end, activities such as training workshops and meetings were designed and carried out.

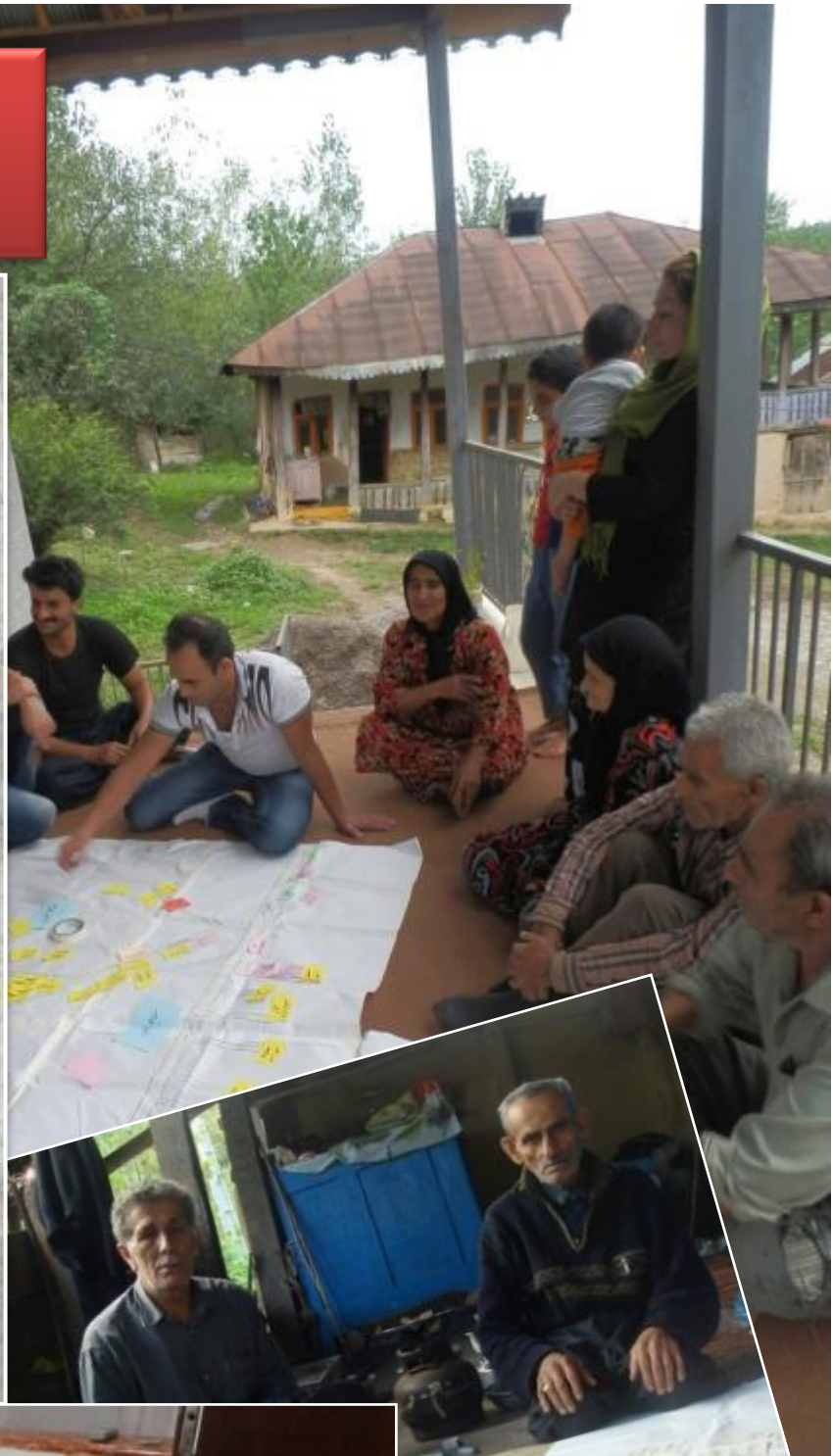


Understanding Life and Livelihood of the Local Community

Understanding the geographical conditions of the village, its history, analysis of various household's livelihoods in each village and understanding different livelihood classes in the village were among the tasks done in the first eight months of the project after choosing the target villages, in order to understand life and livelihood of the local community.

Participation of different groups in the analysis of each of these subjects facilitated the exposure of most of village locals to the project and the project team. It also meant that the various and sometimes opposing opinions of the analysts would be taken into consideration in order to plan the next stages and thus adapting to the circumstances of different groups.

In addition, in this phase the potential and capacities of individual locals, who could be influential in the process of the project, was explored. Planning activities to utilise this potential was taken into consideration for the next stages of the project.



Understanding the Issue of Leopard Conflict/Cattle Loss

"The location of livestock grazing for Gilbaam locals is near the mountain ridges, i.e. the location of leopard territory. Consequently, they are subject to more leopard attacks."

"In Spring and during the growth of leaves, the number of leopards increases and they attack livestock more."

"Nobody accompanies cattle and they go to the forest themselves and come back in sunset."

After three months from the first time the project team came to the village, in parallel to the activities carried out to understand the life and livelihood of the local society and the leads and clues that emerged in this stage, the analysis of the issue of livestock loss (and/or leopard conflict) gradually took shape. During this phase different factors causing damage in various areas of the village were identified and the families involved in the analysis recorded their priorities among each of these factors. Other issues looked into were the documentation of the location of families who suffered casualties as a result of leopard attacks, the location of cattle being attacked by the leopard, and the timeline of these instances. Completion of these analyses, which lasted till the end of the project, ultimately facilitated the proposal of solutions to minimise each type of loss.

"The Department of Environment has released domesticated [zoo] leopards in the forest, and that's the reason they have come so close to the houses."



Joint Planning to Reduce the Cattle Loss Issue

The initial analysis around the issue of leopard conflict/livestock loss set the context for joint planning sessions with the village locals to discuss and plan the reduction and management of this issue. During the first sessions, the locals derived a CATWOE, designed activities and drew out the timeline for execution of each of them.

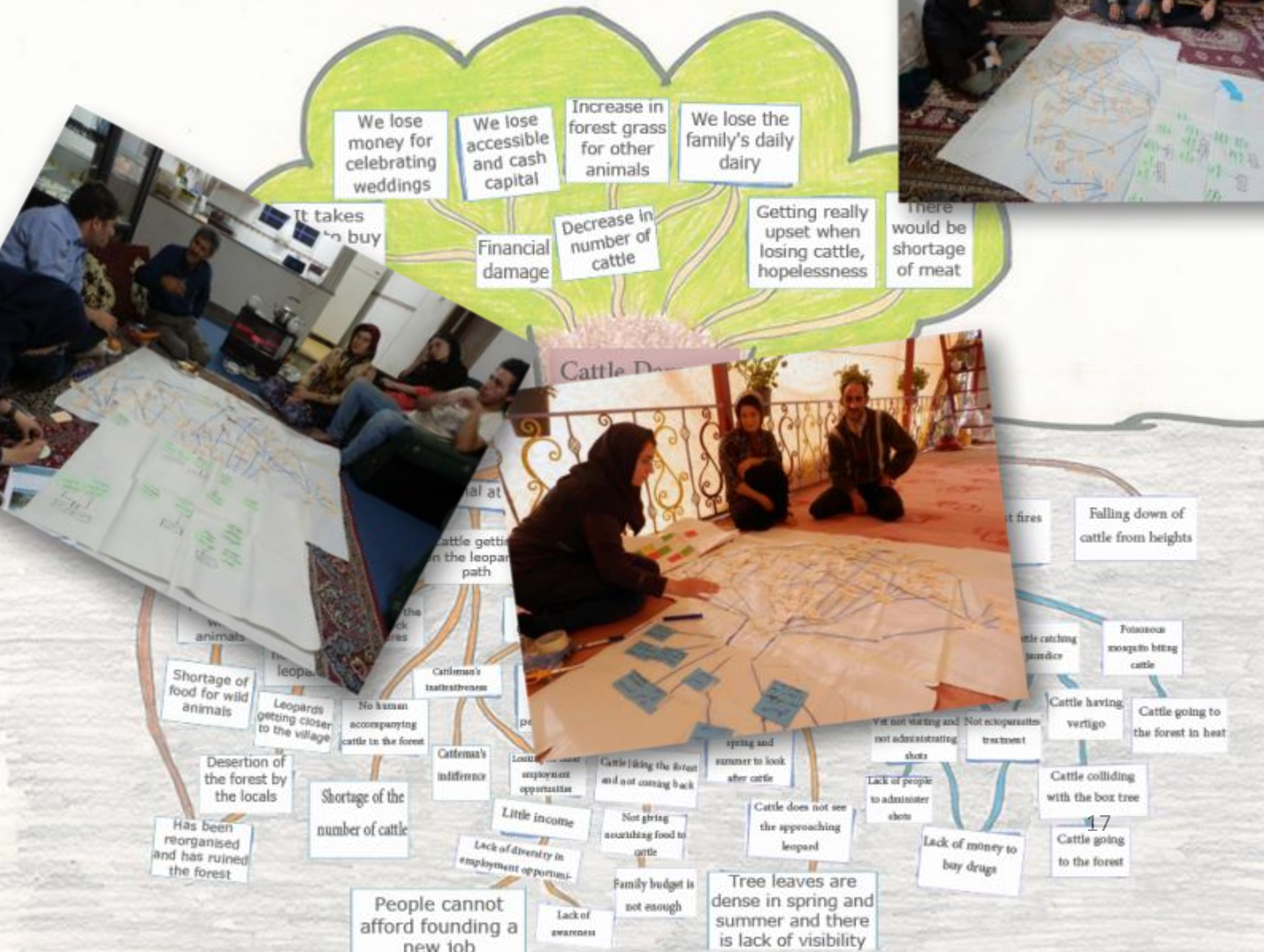
In these joint sessions the locals asserted that they want "protection of the leopard at the same time as no losses to people's livestock due to leopard, or to receive compensation in the event of loss." They planned for this Transformation and defined the "Locals" and the "Department of Environment" as the Owners. Agriculture Jihad and IAEO were also defined as the Actors that could play a role in the execution of this plan. Therefore, the activities defined in the planning session were mostly organising meetings with relevant governmental bodies to the cattle damage issue. In the end, these activities led to collaboration and identification of possible fields of cooperation with some governmental bodies.



“If leopard is killed the Department of Environment would fine us, but if livestock is killed they would not pay any compensation.”

Devising Solutions to the Loss Problem

At the same time as men's collective meetings, finding the root causes of cattle loss. This analysis was completed over seven months during various sessions with fourteen different male, female and household groups. Finally, with the breaking down of the root causes of cattle loss, the locals began to suggest solutions which could help minimise these factors.



Circulating Information among Those Involved

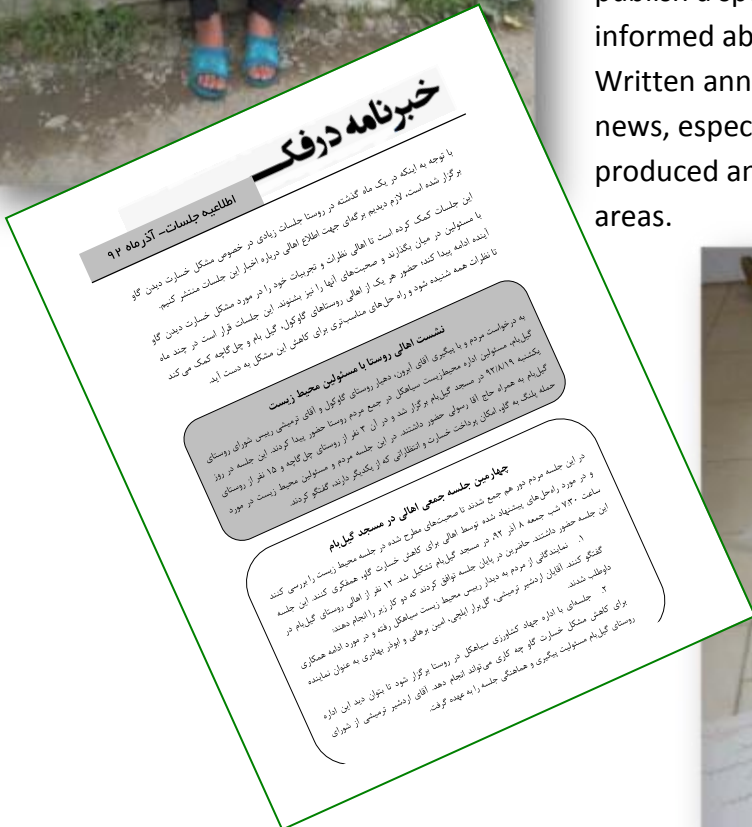


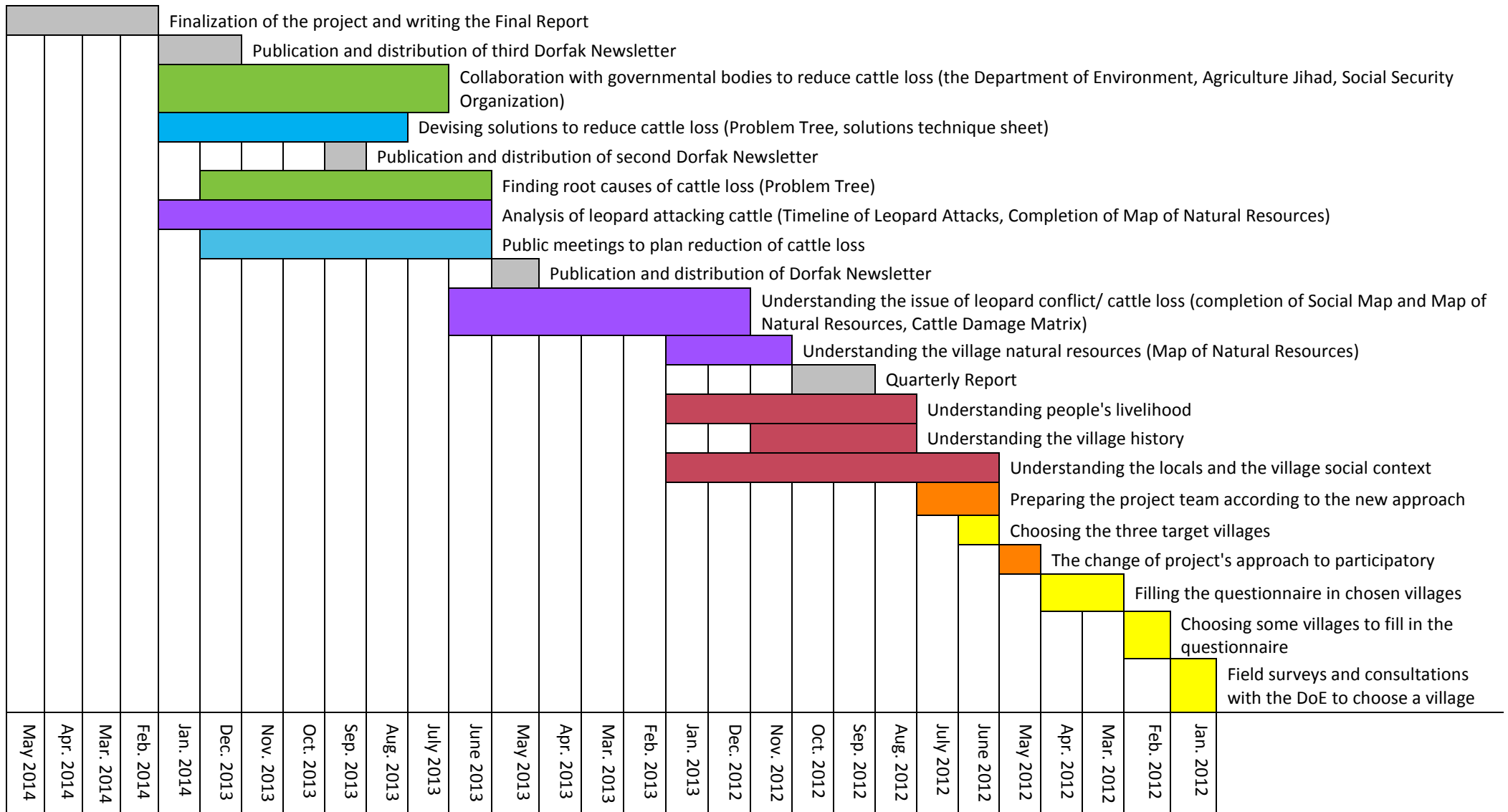
Since each of the locals or families were only present in some of the meetings, it was necessary to inform everybody on the general process taking place. Therefore, we defined various activities with the aim of circulating information among different groups of people involved in the project.

Dorfak Newsletter - published in three issues- was the first tool to share the reports and events of the project among the actors, especially the village locals. The feedback we received for each issue helped us to improve the next issue so the village locals would find it more relevant.

At a certain stage of the project, there were several meetings taking place with diverse groups of people. We decided to publish a special issue to report on them and keep all the locals informed about what was happening.

Written announcements were also a helpful tool to spread news, especially the time and place of the meetings. They were produced and installed with the help of the locals in various areas.





Project Timeline

3

**The Story of
Employing a Process-
Oriented Approach**

Analyzing the Issue of Leopard Attacks on Cattle

At the same time as working to understand local community's life and livelihood, analysis were taking shape that would provide useful leads into the analysis and understanding of the leopard conflict (or livestock damage). Completing these analyses facilitated, on the one hand, new layers of analysis of livestock loss being added to the previous technique sheets, while on the other hand, a conducive context for the analysis of leopard attacking livestock employing new methods to take shape. The combination of these activities led to findings on the issue of livestock loss and resulted in more detailed analysis of issue of leopard conflict. In this chapter the report on the process and results of employing each technique is presented.

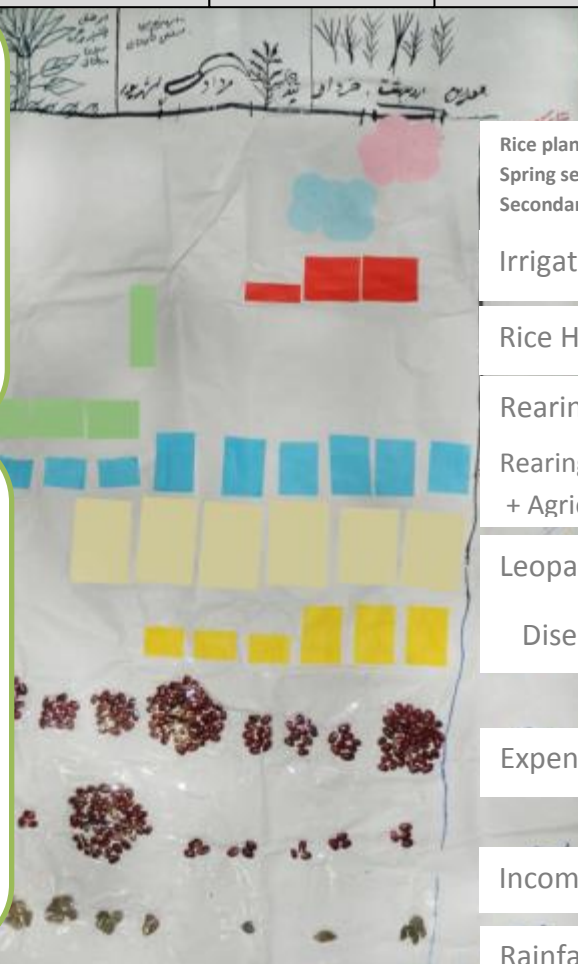
□ Seasonal Calendar

During the first trips to the village, in which we intended to better understand the local community's lifestyle and livelihood, we started the analysis of people's seasonal life using seasonal calendar technique. In this analysis, the locals demonstrated that agriculture, rearing cattle, and using the forest play a role in their livelihood and they identified the seasonal changes affecting each of these factors. During these analyses, livestock damage was also recorded on the technique sheet and it was clear that both leopard attack and disease are factors damaging livestock.

Winter (22 Dec- 22 Mar)	Autumn (22 Sep- 22 Dec)	Summer (22 Jun- 22 Sept)	Spring (22 Mar- 22 Jun)
----------------------------	----------------------------	-----------------------------	----------------------------

The amount of livestock rearing is more in the second half of year, especially in winter, as cattle is kept in the barn during cold days and fodder is fed by hand. But in the first half of year cows go for grazing to the forest and only come back to the barn at night.

Leopard attacking cattle occurs more in the first half of year. This is because in the first half of year agricultural activity leaves little opportunity for the locals to accompany the cattle in the forest. On the other hand, in the second half of year cattle is mostly kept in the barn outside the reach of leopards.



Rice planting in the Spring season
Secondary weeding

Irrigation

Rice Harvesting

Rearing Cattle

Rearing Livestock
+ Agriculture

Leopard

Disease

Expens

Income

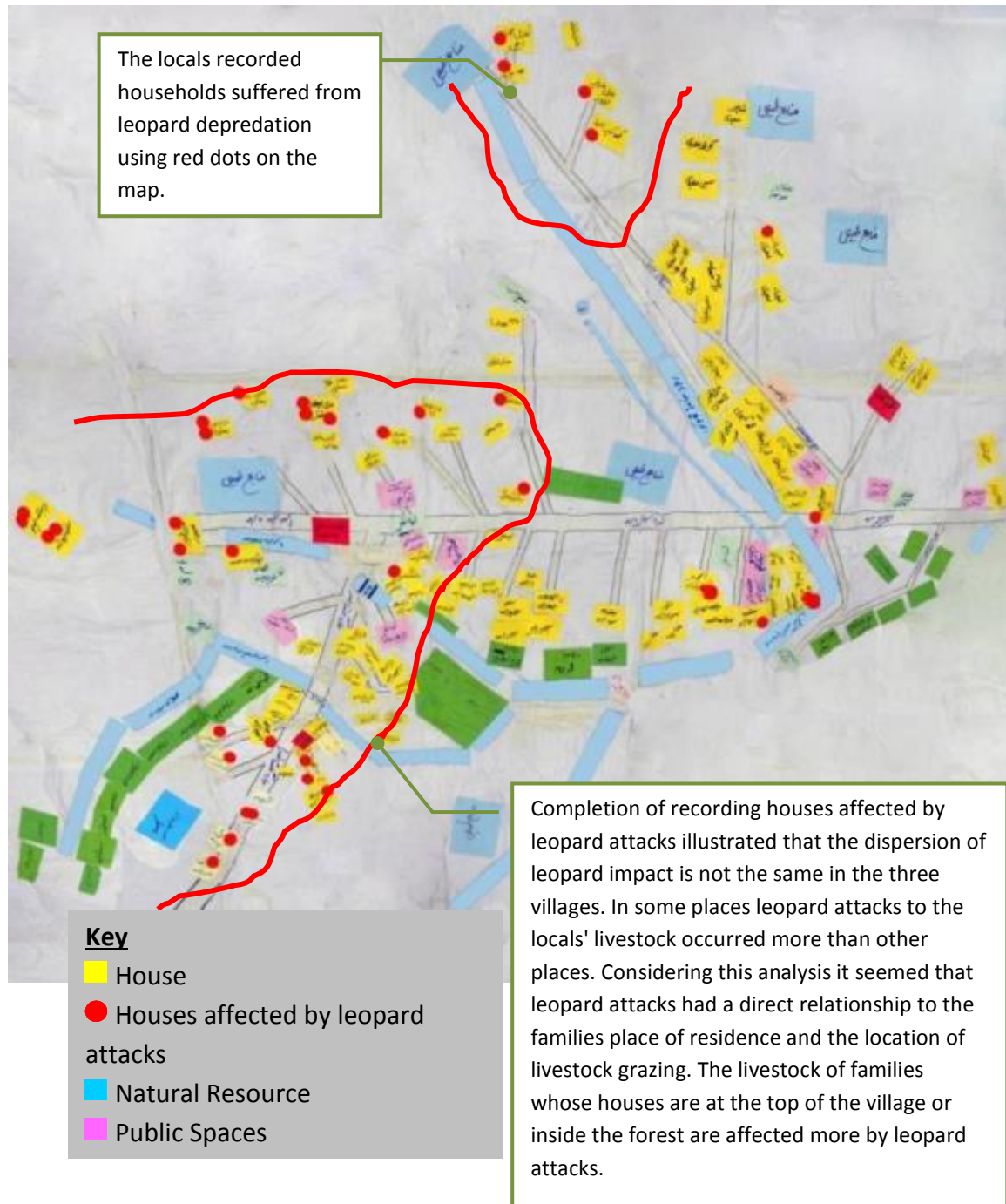
Rainfall

Most of agricultural activity occurs in the first half of year. Consequently the locals are busy in this period and have little opportunity to rear livestock.

Cattle damage is also more prevalent in the first half of year.

□ Social Map

One of the first techniques used was social mapping. This map was employed as a first entrance and talking point to understand the village in various meetings with the locals. In each meeting additions were made to it and the analysis was further completed. During the third meeting, one woman mentioned the subject of leopard attacking livestock. Thus, we suggested recording households suffered from leopard depredation on the map. Gradually, this level of analysis was added to the map and new findings were obtained.



□ Loss Matrix

In analysing seasonal life, locals had mentioned that cattle loss occurs due to disease and leopard attacks. In addition, it was illustrated in the Social Map that the dispersion of households affected by leopard attacks is not the same in the villages. These two factors gave us a clue to employ the pair-wise matrix technique in different locations of the village in order to analyse different types of livestock loss, their importance and the criteria for assessing their importance. In these analyses, that took place in four different meetings in different locations of the village, different diseases harming cattle along with leopard attacks, theft, natural factors and cattle falling from heights were mentioned as factors leading to livestock loss. Analysts compared these factors two by two and prioritised them according to their importance.

For this prioritisation each group had its own criteria, which generally included:

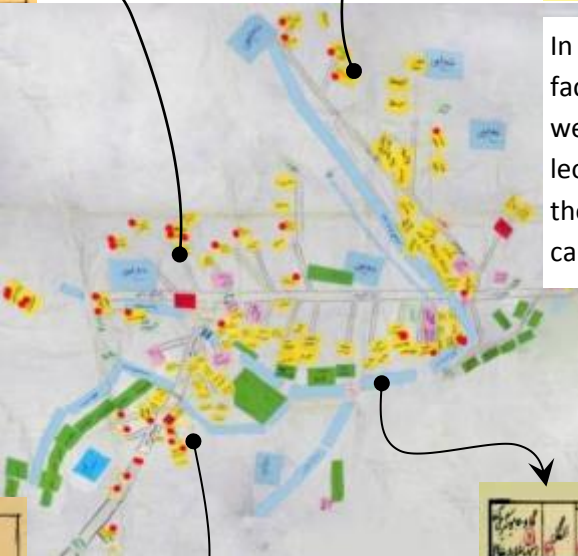
- frequency of occurrence
- possibility of death
- possibility of anticipation
- possibility of prevention
- possibility of compensation/ treatment/ prevention
- number of households involved
- financial costs due to loss



On the basis of these criteria each group had a specific analysis of factors harming cattle. For some, different livestock diseases were the most problematic and leopard was in lower levels of importance. For others, leopard attacks and theft had the same level of importance and were first. For another group, leopard attacks were the most important factor of cattle loss, so much that various diseases were not even mentioned in their analysis.

کرمک	چنگ	سیرز	وفا	سمه	زردی	کورد	اسک	
۷	۸	۴	۶	۰	۵	۲	۳	
کرمک	چنگ	سیرز	وفا	اسک	برخان	اسک		اسک
کرمک	چنگ	سیرز	کورد	وفا	کورد	زردی		کورد
کرمک	چنگ	زردی	وفا	زردی	وفا	زردی		زردی
کرمک	چنگ	سیرز	وفا	وفا				سیرز
کرمک	چنگ	وفا	وفا					وفا
کرمک	چنگ	سیرز	وفا					وفا
کرمک	چنگ							سیرز
کرمک	چنگ							چنگ

کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	
۰	۲	۱	۴	۳			
کرمک	چنگ	سیرز	دزد	دزد	دزد		
دزد	دزد	دزد					
زردی	وفا						
وفا							
سیرز							
چنگ							



In the meeting with Gilbaam village locals, nine factors were suggested, seven of which were related to cattle diseases. Nevertheless, in comparison to other factors, leopard attacks were considered the most important.

In Upper Gavcoul village, five factors causing cattle damage were suggested. Among them leopard attacks and theft were the most important factors causing cattle loss.

دزد	کرمک	چنگ	سیرز	وفا	زردی	کورد	اسک	دزد
۹	۵	۸	۱	۳	۱	۶	۲	۳
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
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دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا
دزد	کرمک	چنگ	وفا	وفا	وفا	کورد	وفا	وفا

کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
۹	۵	۸	۱	۳	۱	۶	۲	۳
کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
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کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
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کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا
کرمک	چنگ	سیرز	وفا	زردی	دزد	اسک	کورد	وفا

In Chelgacheh village, ten factors of cattle loss were suggested, five of which were diseases, two natural disasters, two were wild animal attack, and one is theft. Comparing these factors demonstrated that firstly theft and then leopard attacks are the most important factors of loss.

In Lower Gavcoul, the damage matrix illustrates that diseases have been suggested as the most problematic factors. The analysts have scored leopard attacks and theft with the same score and as their sixth priority, among the eleven factors of loss.

These analyses illustrated that the most problematic harm to cattle is different for each family living in diverse conditions. For people whose livestock does not go to faraway forests, diseases are the most important loss factor. But for those living in Upper Gavcoul, Gilbaam, and Chelgacheh, whose livestock graze in more distant areas, the damage due to leopard attacks is more important. In most cases, livestock theft is as important as leopard attacks in harming cattle.

It was after the findings from the matrix that it became clearer that "leopard attacks" is not the only problem encountered. What should be considered as the pivotal concern is "cattle loss." Because alongside leopard attacks, other factors exist which have the same or even more significance for different groups of locals. Therefore, the subject cannot be analysed without considering its connections and complexities. Consequently, in Problem Tree Analysis and subsequent suggested solutions, what was considered as the main problem on the tree trunk and was analysed by the locals was "cattle loss."

□ Formation of Map of Natural Resources

Locals discussed the locations of cattle grazing while drawing and completing the Social Map of the village, and there was no possibility of showing this on the Social Map. To record these discussions a map in a smaller scale was needed so the forests surrounding the village could be illustrated as well. Thus, the idea of drawing the Map of Natural Resources took shape and it was carried out in different meetings with village locals. The locals first drew the forest surrounding the village with great detail on the Map of Natural Resources, demonstrating the great role it plays in their livelihoods.



The location of cattle grazing is different in summer and winter. In summer when the weather is good the cows go to farther forests and stay there from dawn to dusk.

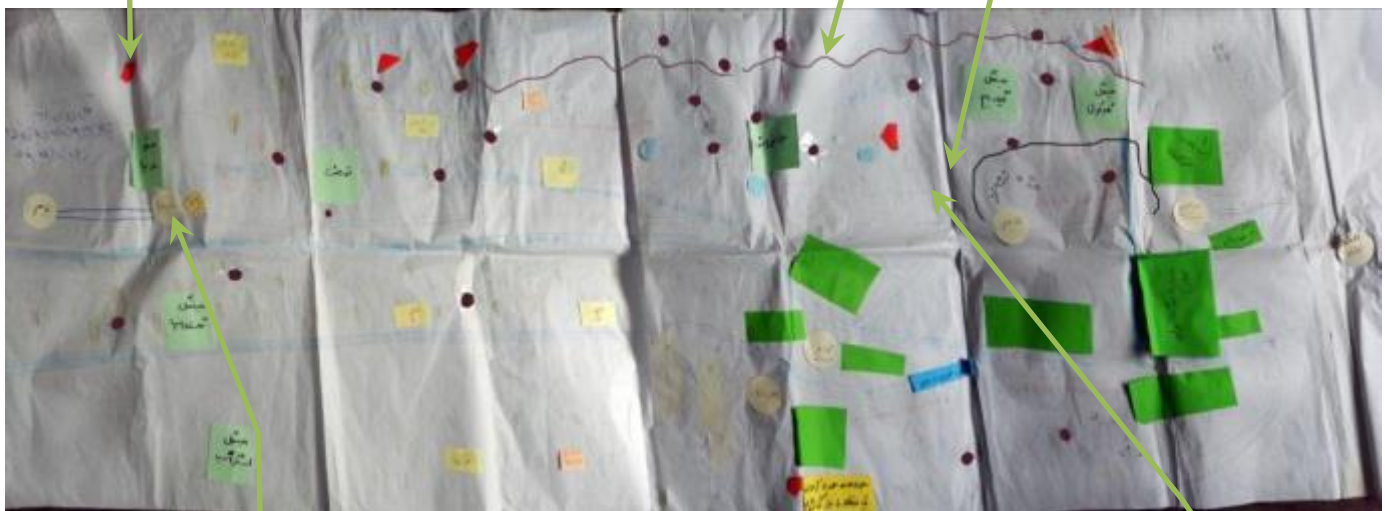
Locals used beans on the Map of Natural Resources to demonstrate where in the forest the village cattle grazes. They identified that in winter cows go grazing in marginal and surrounding forests.

Map of Natural Resources was gradually shown to different people in the local community and each person or group would add something new to it. One interesting point added during the rounds was the location of boxwood growth in the forest, called *Kish* in local dialect. According to the locals boxwood is the hiding place of leopards. They also identified mountain ridge as the leopard pathway on the map.

Using the clue of the connection found between the location of livestock grazing and the possibility of leopard attacks, we asked the analysts in each meeting to record the location of each leopard attacking livestock on the Map of Natural Resources. Locals did so by placing red triangles on the map to identify where in the forest the instances of leopard attack had occurred.

Locals identified the mountain ridges as the pathway of leopards on the map.

Boxwood is the hiding place of leopard according to the locals.



According to the locals, Chelgacheh forests due to having dense boxwood are an appropriate place for leopards and thus leopard attacks happen there.

One of the locals, with good knowledge of forests surrounding the village, upon seeing the Map of Natural Resources commented that as these forests are on the mountain ridges and have dense boxwood, they are leopard territory and a good place for camouflage. In addition, these forests have good pastures and are appropriate for livestock grazing. Therefore, leopard attacks occur more in this location.

□ Recording Livestock Pathway on the Map

Once in one of the meetings and based on the points put across by one of the analysts, idea of identifying the cattle pathway from the barn to the forest emerged, and this was something that could facilitate completion of analysis. He recorded his livestock pathway on the Map there and then. Afterwards, in other meetings when sharing the Map with the locals, they would record their livestock pathway on it.

Seeing the cattle pathway on the Map in one of the meetings led to the suggestion of using a joint shepherd as a solution to cattle loss. One of the locals, while explaining that leopard attacking cattle occurs when cattle is alone in the forest and nobody is accompanying it, suggested that families whose cattle share the same pathway can share the responsibility and take the cattle to the forest in turns.

This suggestion, on the one hand was added to the technique sheet recording solutions to cattle loss that the locals had produced, while on the other hand, gave another meaning to identifying livestock pathway on the Map of Natural Resources as a stage of planning.



Seeing the livestock pathway for each household and the proximity of the grazing location to location of leopard attacks demonstrated that numerous attacks affecting one family all occurred around the same spot.

Following this suggestion, the Map of Natural Resources was installed on the wall of a room next to a village shop. This shop was a place where the village locals would regularly gather and local discussions would usually take place there. Installing the Map of Natural Resources on the wall, in a part from the content and subject matter that was added to the map, shaped a new experience: the experience of completion of analysis by the locals themselves in the village without our presence. During the time the Map was on the wall more cattlemen recorded their livestock pathway on the Map and this map became an appropriate reference for executing the suggestion of using a joint shepherd.

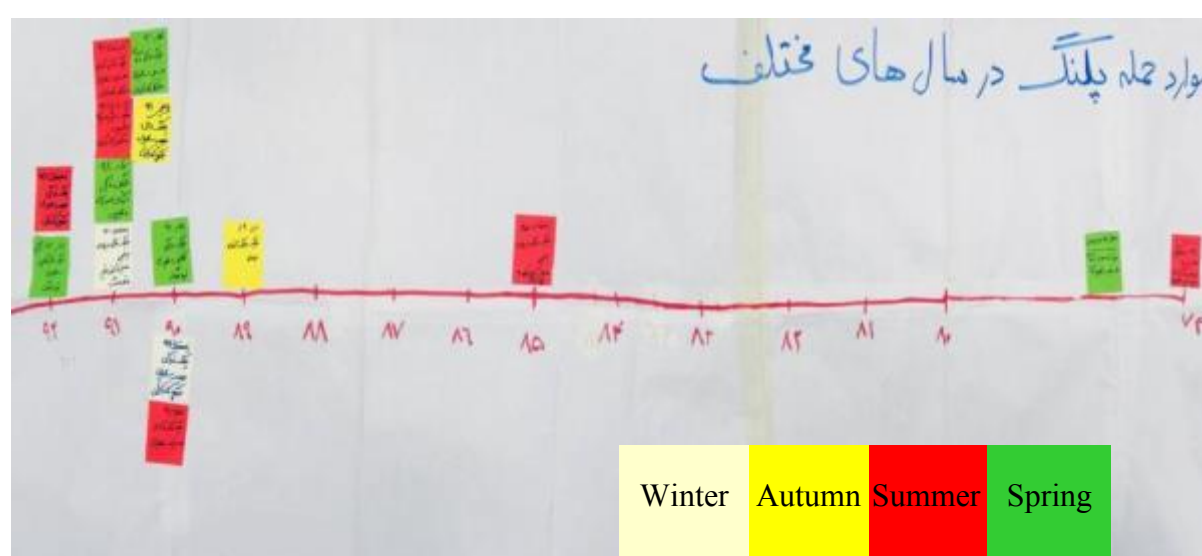


Cattlemen from the three villages recorded their livestock pathway on the map using the colour blue.

□ Formation of the Timeline of Leopard Attacks

While taking the Map on rounds among the cattlemen, especially families identified as affected by leopard attacks based on the Social Map, points were raised which could not be recorded on the Map of Natural Resources. Therefore, another technique sheet was added to the analyses, where the locals recorded the season, time, and circumstances under which the cattle was attacked by leopard in a timeline. Besides, throughout the project we faced various claims regarding leopard attacks. Consequently, the idea of documenting leopard attacking cattle as a database was on our minds. The timeline of leopard attacks could record the data on the attacks as well as creating a good opportunity to analyse the trend changes in leopard attack throughout time.

The instances of leopard attacks in different season were recorded using different colours.



Due to the sensitivity surrounding recording instances of leopard attacks, we did not go to a family specifically to talk about this topic or take it on rounds like other technique sheets in order to complete the timeline with prior planning. We let the analysis of the trend in leopard attacks follow its natural course and whenever other analyses and discussions permitted. Therefore, the number of instances recorded on the timeline are not enough to allow for a precise and reliable analysis on the frequency of leopard attacks in different seasons, but it can be recognised even from this graph that the instances of leopard attack were more during Spring and Summer.

Cattle or Livestock?

From the first days of the project, we used the word "livestock" in our notes and conversations. In the discussions among ourselves we would talk about the "livestock loss" and we would write that "people take their livestock to the forest" in our reports.

We were aware of the fact that people in these villages rear cattle and do not have any other type of livestock which would require us to use a generic word like "livestock". Incidentally the word "cattle" was more accurate and useful but we kept talking about "people's livestock" not their cattle! This might be because using "livestock" is more formal and stylish than "cattle"!

As our interaction with the villagers increased we became more aware of this difference. We realised that when we talk to them, we would ask "what causes loss to your *livestock*?" and they would reply "there are various factors harming our *cattle*." We would always speak of *livestock* and they would always talk about *cattle*.

The most interesting incident occurred when we wanted to analyse the Problem Tree of cattle loss with a group of women for the first time. We spread the sheet and after explaining the problem tree, we wrote on the tree trunk "Livestock Loss." In the middle of discussion, the women explained that before the implementation of the Village Reorganisation Plan, people reared sheep and were subject to more wolf attacks. But after Reorganisation, the locals do not have sheep anymore and have not heard of wolf attacks but instead leopard attacks have increased. With this explanation they wanted to tell us that what should be written on the tree trunk was not "*Livestock* Loss" but "*Cattle* Loss".

The process of change of word usage from *livestock* to *cattle* is also visible in Dorfak Newsletter. In most of the headings and articles in the first two issues the word *livestock* is used, and one rarely sees the word *cattle* in the articles. However, in the headings and articles of the third issue there is no trace of the word *livestock* and wherever cattle is discussed the word *cattle* has been used correctly.

We gradually learned to use the word *cattle* like the locals, and fight with our unconscious preference for using the word *livestock*, which might sound more urbane and sophisticated. But as it is apparent in this report we have not been totally successful. The word *livestock* appears here and there beside the word *cattle* in our writings, whereas both refer to cattle. It might have been possible to replace all appearances of "livestock" with the word "cattle" using Microsoft Word features, but we preferred not to do so in order to keep the traces of this issue in our report so our report would be a reflection of what we experienced in the field.

Joint Planning for Reducing Loss

After a few months and the near completion of the phase on "Understanding Life and Livelihood of the Local community," we decided to publicly present the technique sheets, completed in different meetings and by various families, to get public approval by the locals. Also, this meant a more accurate introduction of the project team and public and official announcement of the project.

One technique, with a good potential of involving all the locals which necessitated everybody's participation, was the "Social Map". However, we had different ideas about publicising it, each with its own pros and cons. Therefore, we decided to discuss it with a group of men and women more familiar with our work and ask for their opinion.

To do this, we asked some men and women separately and asked them to suggest the time and place of the meetings. Men suggested the Gavcoul Village Council as an appropriate place and women considered Gilbaam Mosque more suitable.

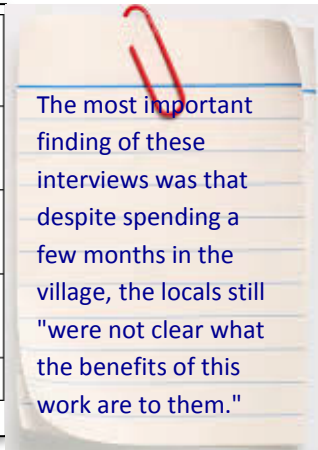


However, the men's meeting did not take place despite preparations and invitations. Actually in the funal coordinations before the meeting we realised nobody was planning to participate. This was not pleasant for our team members and created doubts around possibility of holding joint sessions. But we decided to understand why this has happened

and actually understand why men and some of the women, who had promised to participate, did not come.

Therefore, we devised a questionnaire and decided to interview the people invited to the meetings. We aimed to hear their reasons for their non-participation and their suggestions to solve this problem.

Why the locals do not participate in the meetings	Answers
This work is not related to their life and livelihood	●●●●
They did not want to participate from the beginning but were shy to let you know	●●
It is not clear what the benefits of this work are to them	●●●●●●●●
Now is not an appropriate season for gatherings	●●●●●●●●



Some of the interviewees, using the example of weddings, said that people invited to the wedding by card would definitely come. Therefore, they suggested giving people written invitations. In addition, written invitations help people remember the time of the meetings as well as making it more official

Considering the results of interviews we decided to publish a Newsletter and clearly and transparently answer questions raised during our stay in the village and interviews. Therefore the titles of most articles in the first issue were the questions about us, which the people had and wanted to know the answers to.



We gave the people we had interviewed a Newsletter as well as a letter. In the letter, in addition to thanking them for their consultations and cooperation, we explained what role we expected them to play and expressed our hope in their participation in the future.

With distribution of the Newsletter, a group of locals said they will definitely participate if another meeting is set up.

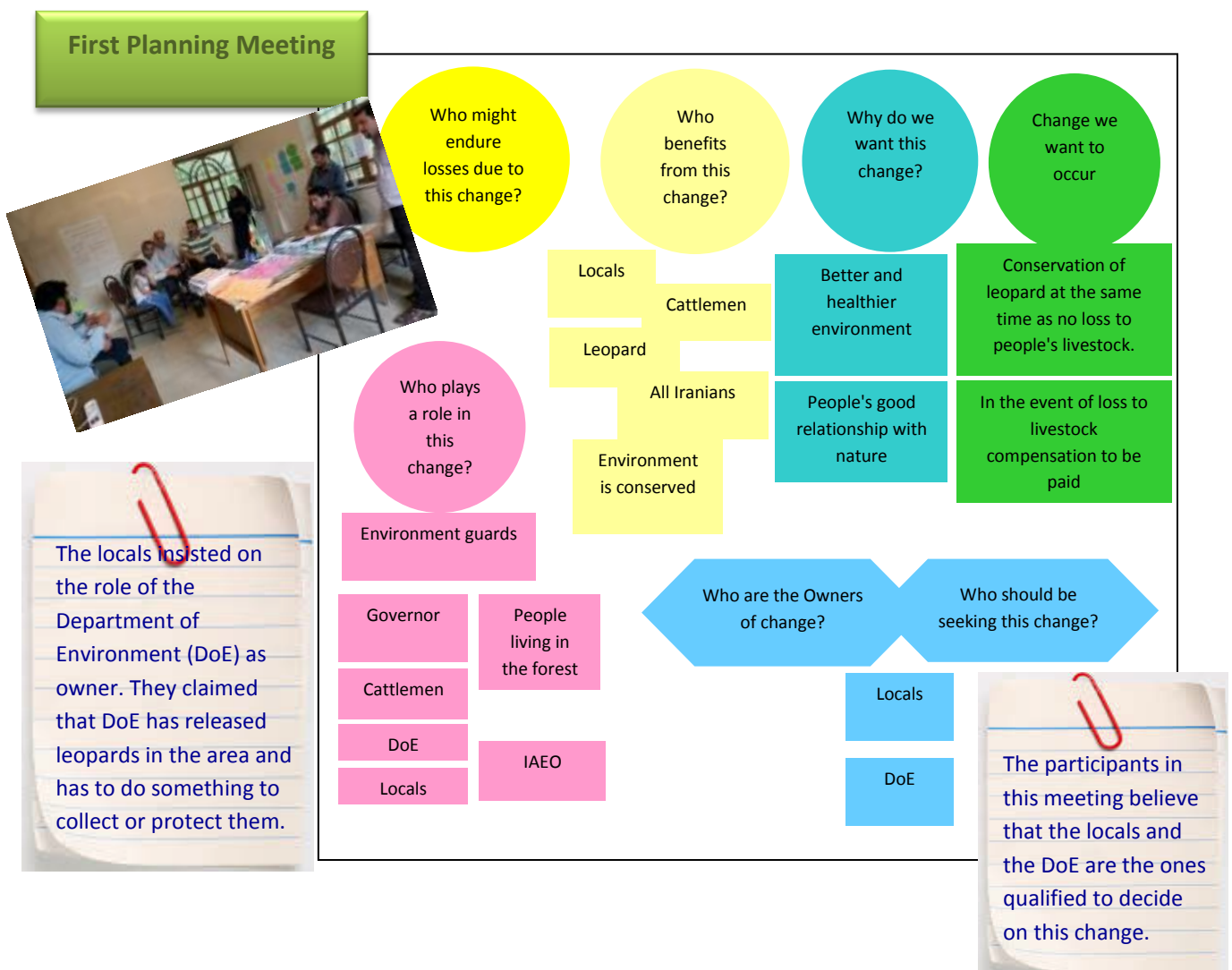
We had decided to hold the first joint meeting for the purpose of publicising the project and presentation of the Social Map. However, after publication of the Newsletter, publicising had already occurred and there was no need to hold a meeting to present our work and the Map. Consequently, we decided to hold men's and women's meetings with the purpose of planning the project and examining the problem of cattle loss.

□ **Women's meetings**

Women's meetings were held with the aim of finding the root causes of cattle loss. A complete report on the meetings and the formation and completion of the Problem Tree and suggestion of solutions for it has been presented on the section on "finding causes to cattle loss."

□ **Men's meetings**

Men's meeting was held with the aim of project planning. In the first meeting the CATWOE was devised from the local viewpoint. Also, the impact of leopard attacks on people's lives was discussed.



Introduction of this subject resulted in consulting a group of leopard ethology specialists in Iranian Cheetah Society. This helped us prepare some information on the possibility of releasing zoo leopards in the forest and scientific and convincing reasons for leopard getting close to the villages and attacking cattle.

At the end of the meeting with the locals, the participants had different feedbacks to the meeting; some found it beneficial while others said it was useless and it was not clear what is going to happen at the end and whether the meetings would continue or not?

These two issues helped plan the contents of the second meeting. Completion of CATWOE, designing activities and timetable of their execution as well as discussion of releasing leopard by DoE were subjects discussed in the second meeting.

Second Planning Meeting



Understanding local life and its relationship to nature

Setting up meetings with DoE, Agriculture Jihad and Social Security Organisation (SSO) were activities designed and recorded on the time plan.

Attempts to hold joint meeting in the village

Meetings and discussions on cattle loss

Planning and organisation to reach the intended transformation

Saber Bazdar, one of the village young men who owns a livestock and poultry food shop, voluntarily accepted responsibility for organising the meeting with the Social Security Organisation (SSO).

He acquired the regulations and list of insurance prices by going to the SSO in order to present them in the next meeting.

The locals believed the most important and the top priority is organising the meeting with the DoE. Therefore, we decided to plan for inviting the DoE in the next meeting. To do this, we devised a list of people who we thought would be beneficial to participate in the planning meeting and each of the locals accepted the responsibility of inviting and informing some of them.

Our team prepared a sheet for presentation in the next meeting with Saber's help in order to inform the locals on important points of the regulations, documents, conditions, and the price of insurance.

We also decided to go to the DoE and familiarise them with the activities that had taken place in the village as well as giving them the first issue of Dorfak Newsletter. This would help them to be prepared and familiar with what had happened in the village when the locals invited them to a meeting.

Third Planning Meeting

A few of the locals participated in this meeting. We realised that Summer is the time of weddings in the village and most people are busy with that.



The Map of Natural Resources was analysed in this meeting and the solution of "joint rearing of cattle" was suggested.

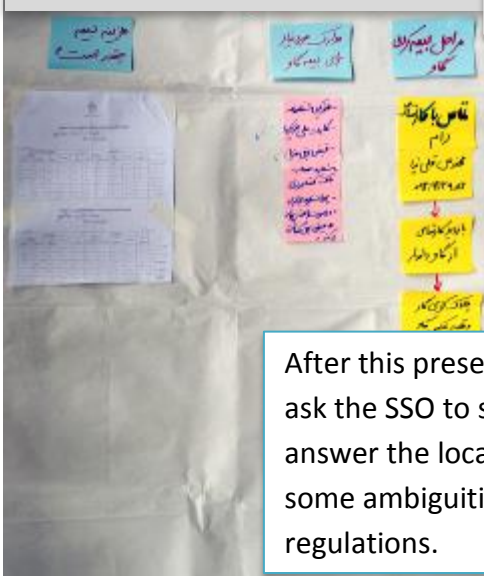
The village governor suggested that it is better to hold the meetings at night from now on, as the locals have more free time at night. Also, an invitation was written by the locals and it was decided to distribute it for the next meeting.

Following this suggestion, the Map of Natural Resources was installed on the wall of the Discussion Room so the locals could record their cattle grazing pathway on it.

Considering the few number of participants, it was decided that planning for the meeting with the DoE as well as presentation of information on insurance regulations to be done in the fourth meeting. Participants volunteered to distribute the invitations of the fourth meeting, also notices were installed in various locations of the village.

Third Planning Meeting

~~How to insure our livestock? cattle~~



Presenting information on Insuring Cattle

Saber Bazdar presented information on different stages of insuring cattle, necessary documents and a price list for each type of insurance.

After this presentation , it was decided to ask the SSO to send a representative to answer the locals' questions and clarify some ambiguities surrounding the regulations.

A representative of the project team along with Saber, representative of the locals, went to the SSO several times. During these negotiations different issues of the Newsletter were given to them. The published interview with one of the village locals on insuring cattle was very interesting for them and persuaded them to come to the village.

Planning for the meeting with DoE representatives



Mr Alipour

Mr Gol Barar Ilchi

Mr Iman Dalili

First, DoE and SSO should come and explain what their plans for damages are?

General Manager of DoE and SSO sign an agreement to pay more compensation for cattle casualties

Report on what has been happening village

Greetings and Introduction

What is DoE's opinion on cattle entering the forest?

10min

Entering the forest is our right. Our lives are dependent on the forest.

Ask whether DoE has released leopards in the area?

5min

2 people from Chelgacheh

2 people from Gavcoul

If leopard eats the cattle, at least half of the price be paid.

30min

If leopard is killed DoE fines us, but if cattle dies no compensation is paid

It has been proven that people of these villages have killed leopard, but leopard had eaten cattle. Loss perception is one-sided.

What are DoE responsibilities?

2 people from Gilbaam

15min

10min

5 min

When leopard eats what's ours who is accountable?

When leopard eats cattle in the forest, SSO says we should go to DoE, where should we go?

Location: Gilbaam Mosque
Date: Thursday and Friday
Time: Anytime DoE comes
Inviting DoE: Mr Ayroun, Mr, Tarmishi
Food: Tea and Pastries- Gilbaam Village Council

After setting up the time for the meeting with the DoE, this meeting did not take place. It seemed that the village Governor, who had accepted the responsibility on behalf of the people, had not been following up on it seriously. Therefore, we decided to hold another meeting and see why nothing had happened. The meeting held with few participants clarified that the follow-ups had been done verbally and over the phone. It was thus decided to send a written request by the locals. After some days the negotiations reached a conclusion and the time of the DoE meeting was set up. Consequently, a group of the locals prepared invitations and invited the people to participate in the meeting with the DoE by distributing them. Also, a notice was installed in various areas of the village.

Meeting with the DoE

This meeting was held with participation of the General Manager and Environmental Expert of the Siahkal DoE. It was the largest joint meeting. There was someone from each family and almost everyone affected by leopard attacks were present, even people we had not seen much of throughout the project.



People asked their questions and the DoE officials offered some explanations on the questions and the problem of wild animals attacking livestock. These explanations faced criticisms and more questions from the people and the discussion continued.

“Leopard's natural prey is boar. Until boar is present in the area, leopard never attacks cattle.”

“DoE currently does not have the budget to pay compensation for cattle loss.”

“The cattle left in the forest for 1-2 days is called wandering livestock and when leopard attacks wandering livestock we say it was after its food and it should have attacked.”

“The number of leopards is few and limited and it is in danger of extinction. Therefore, it is not possible for the DoE to bring it from somewhere else and release it here.”

“As mentioned in Problem Tree, as eating cattle is easier, while boar is present in the area, leopard still attacks cattle.”



“Do you spend all your time in the office? People cannot spend 24 hours looking after chicken and eggs. Cattleman leaves to eat his food, during that time attack happens.”

At the end, the General Manager of DoE had some suggestions regarding the problem of leopard attacking cattle:

DoE could appoint a Hunter from the locals. In event of seeing leopard the Hunter has permission to shoot the air on continuous days so the area would become insecure for leopard and they would get far from the village surroundings.

If leopard attacks your cattle, report on it. Our specialists fill in forms and send them to the Provincial Governor. There they set compensation amount. Maybe it would be better this year and the government would make a decision to pay the delayed compensations.

We received different feedbacks from the locals and the DoE officials after the DoE coming to the village and discussing existing concerns around leopard attacks and cattle loss among the locals. These feedbacks led us to set up reflection meetings. This reflection was done separately among the project team, the locals, and the DoE officials.

Reflection on the meeting with the DoE by the locals

We presented the evaluation by the project team among the locals and asked for their opinions.

“We did not reach any conclusion. DoE said from the start that cattle goes to leopard territory and we do not have any responsibility.”



“There were some good points like both leopard and cattle should be considered.”

We sometimes received some SMS from the locals asking about the next meetings or Newsletter issue or just asking how we are.

For inviting people to this meeting SMS was also used as a tool of circulating information.

It was decided that representatives of the locals and project team go to the DoE to report on their feedback as well as to negotiate on different areas of collaboration.

Our options to continue our cooperation with the DoE

Not to work with the DoE

Report on this meeting to the DoE. Ask what their opinion is on the meeting held. How we can cooperate with each other in the future.

Discuss the solutions suggested by the DoE with them and the possibility of their execution

We cannot do anything with the DoE.

Gol Barar Ilchi Sirous Ilchi Amin Rahaee Ardeshir Tarmishi Abbas Bahadori

Subsequently, collaboration with Agriculture Jihad was discussed. Two representatives were chosen for this task and it was decided that they would go and negotiate with Agriculture Jihad along with a representative of the project team.

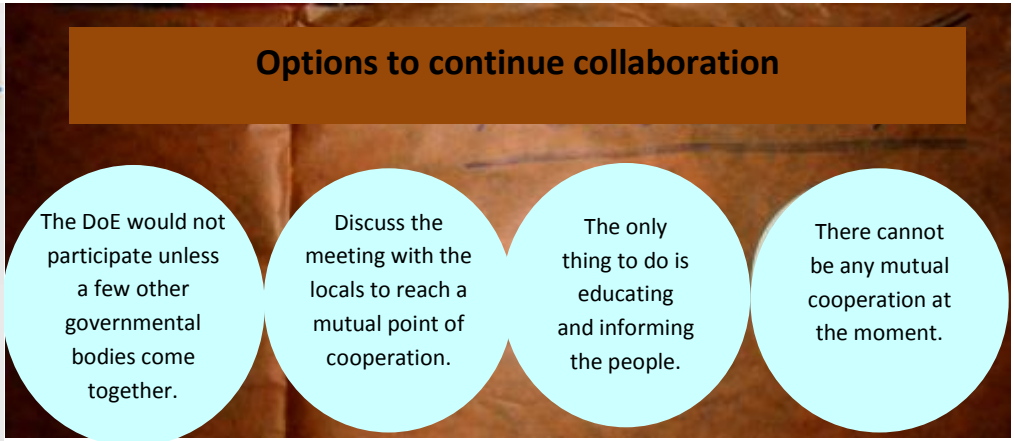
Reflection of the meeting with the locals by the DoE officials

“The number of participants was low. Invitations should have been sent to neighboring villages.”

“The locals' concerns and questions were answered and the ambiguities regarding the DoE was clarified.”

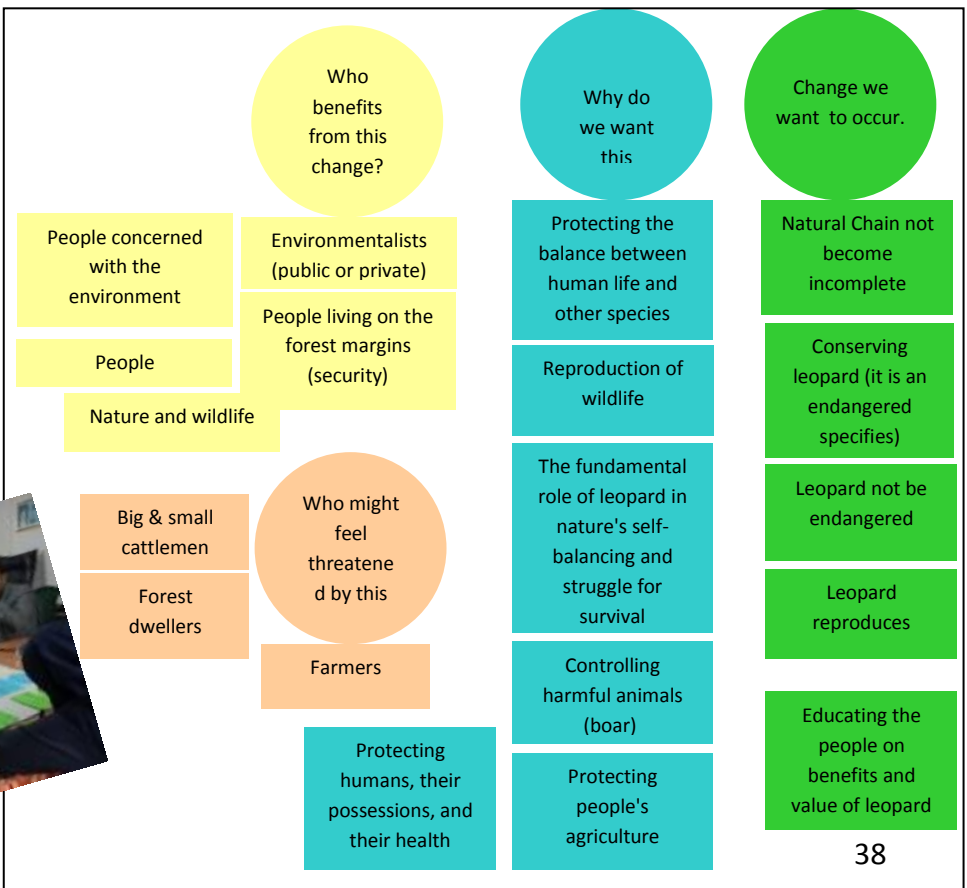


One of the DoE experts suggested doing a similar plan to the local one for the DoE with the help of the project team.



Planning with the DoE to reduce leopard conflict

Initial plans done with the DoE. It was demonstrated in this plan that the DoE is looking for a transformation so "leopard would not be in danger of extinction."



Meeting of local representatives and the DoE officials

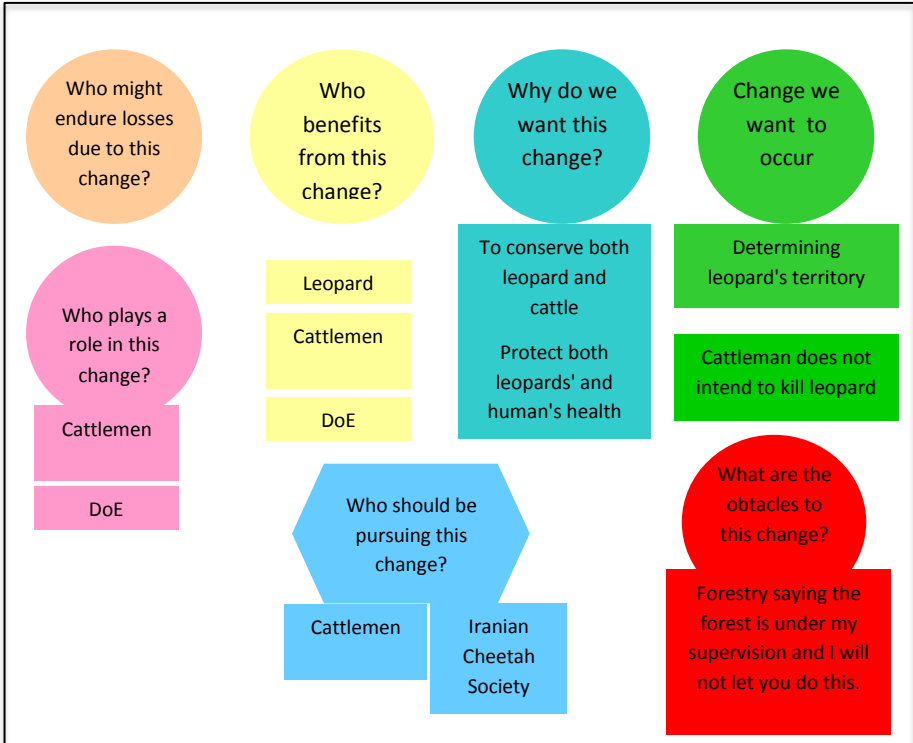


The head of DoE suggested that if the local people would report which points they see leopards, the DoE could set up cameras. This would help obtain more precise information on the area's leopard population and its roaming territory.

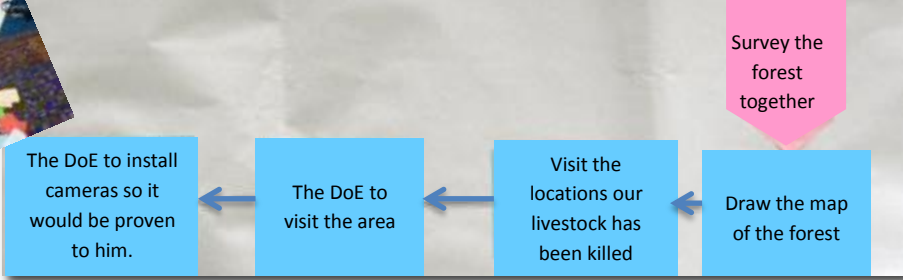
This suggestion was considered by the locals and it was decided to plan and discuss it.

Plans for determining leopard range

In initial discussions with two of the experienced cattlemen in the village a plan was devised for "determining leopard territory" in the forest. The participants believed that if this change occurs, "both cattle and leopard will be protected." Moreover, the process to reach this transformation was defined.



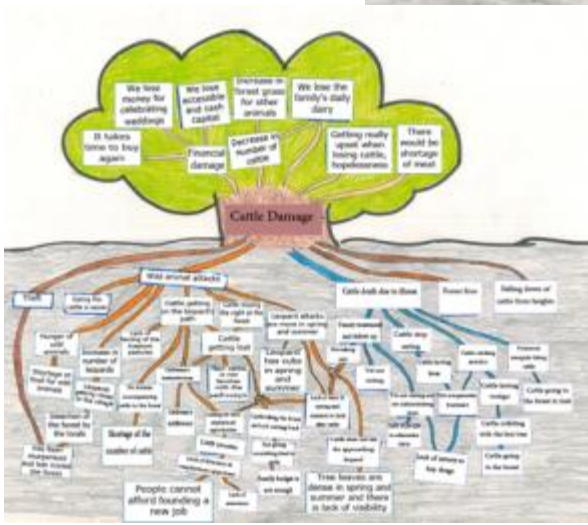
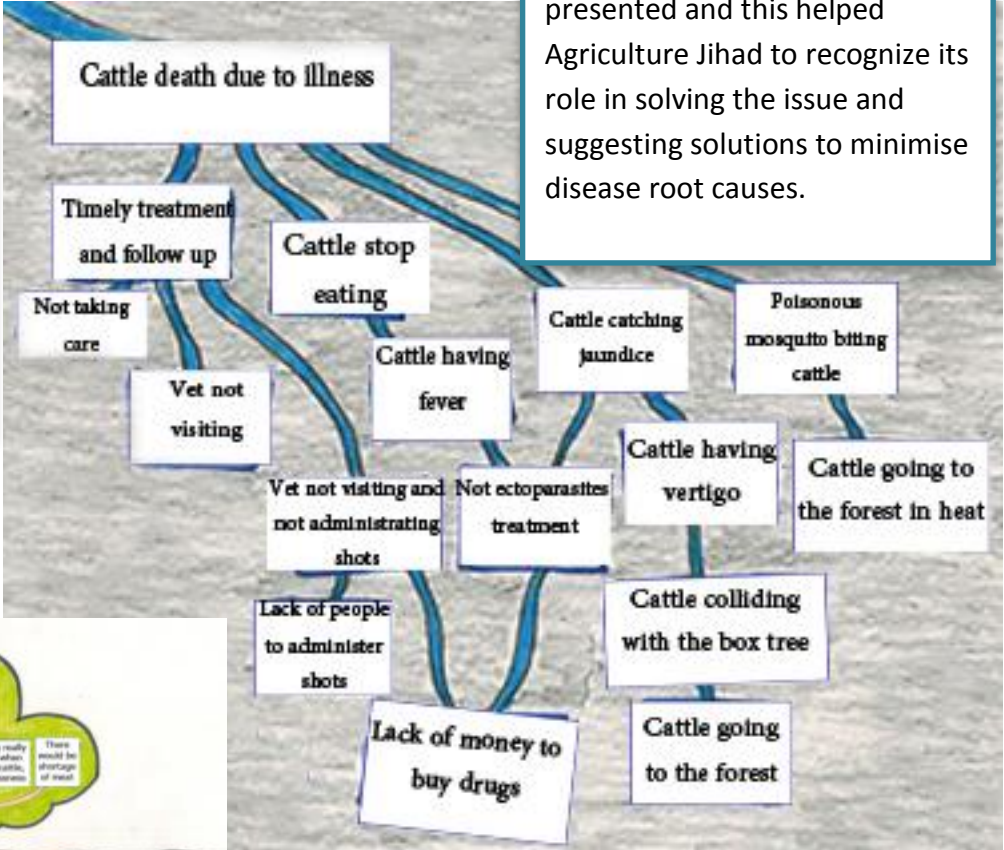
Activities required for the intended change to occur



Forming interaction with Agriculture Jihad

In the meeting between Agriculture Jihad and the local representatives, the locals' analysis of cattle loss was presented and this helped Agriculture Jihad to recognize its role in solving the issue and suggesting solutions to minimise disease root causes.

Supervising insurance regulations for paying compensation in event of leopard attacks and changing them if necessary.



Setting up free veterinarian education lessons.

Supervising Agriculture Bank regulation to facilitate conditions of getting livestock loan.

The entire activities carried out in the process of joint meetings, resulted in various outputs and outcomes. In addition, opportunities and leads were generated and found which could be the basis for the next steps and outcomes. These factors have been discussed in length in chapter on "Opportunities Generated and Leads Found in the Project."

Finding the Root Causes of Cattle Loss

In our discussions with the village locals we realised that loss of cattle is a major concern, and that many factors contribute to it. Finding a solution for this problem might seem difficult at first. But if each of the factors causing cattle loss is examined separately, we can discover the causes that are not that impossible to resolve.

On the other hand, while drawing up the matrix of losses it was determined that theft, illness and leopard attacks are the most important factors causing cattle loss in these three villages. In order to plan for the mitigation of these issues, the factors causing them should be understood. So we employed Problem Tree Analysis from June 2013. This was first done in a small group of women from Gilbaam village.

In this meeting, illness, forest fires, falling of cattle from heights and wild animal attacks, including leopard attacks, were identified as the main roots of the Problem Tree and some of them were discussed in more detail.



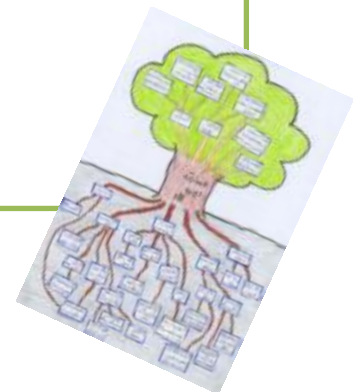
The women of all three villages were invited to participate in this meeting, and taking into account their suggestions it was decided that the meeting would be held in Gilbaam Mosque, but those who participated were only from Gilbaam. We realised from this incident that we cannot bring all the women together in one place and the meetings with women of each village should take place in that village. Consequently, we decided to take the Problem Tree to the separate meetings with women of Chelgacheh and Gavcoul as well.

Therefore, in the next meeting, held with Chelgacheh women, the Problem Tree was analysed and completed. In this meeting new roots and causes specific to that village were proposed.

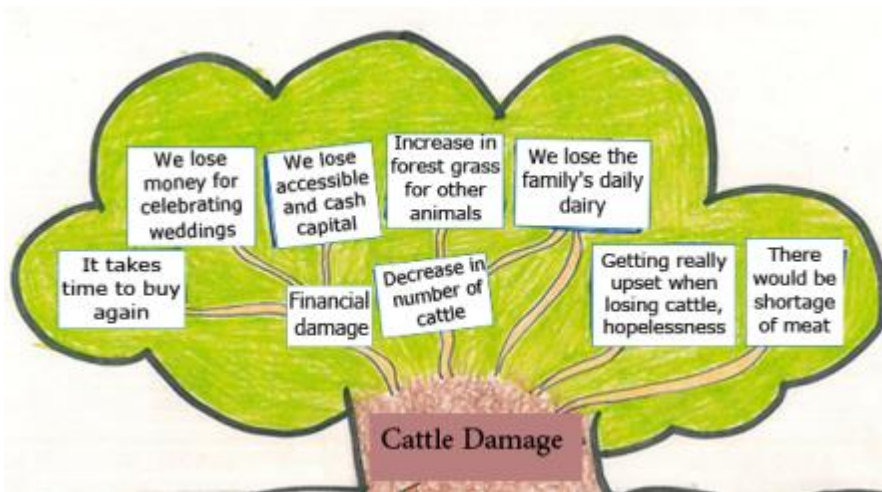
In this meeting, there were some children present as well, which created some opportunities and caused some challenges. On the one hand, it resulted in diversity among the analysts and analysis of the problem from different perspectives. On the other hand, it led to an increase in the speed of analysis, leaving little room for contemplation on the cards and phrases.

After each implementation of a technique among the people we would review it among ourselves in order to see the issue more from their perspective. It was in one of these reviews that we realised some of the phrases are not actually problems or that some of the more obvious causes had been left out. So we took the Problem Tree to the same group of people and discussed our interpretation and doubts with them. Thus, some of the roots changed and new roots were added to the Tree.

One of the roots which became more detailed, was the root referring to "forest fires". One of the roots which became more detailed, was the root referring to "forest fires". The analysts identified "open fires in the forest" as one of the root causes, which was itself a result of "people coming to the forest for entertainment." When other causes of forest fires were discussed, the analysts explained that the people (the locals) themselves set fire to the forests as well. Discussing it further, it emerged that there exists a plant in the forests called "kish" or boxwood, which is dense. Kish is the hiding place of leopard and other wild animals and the people going to the forest are afraid of being attacked by such animals. Therefore, the locals set fire to the kish in order to create better visibility in the forest and this results in burning of the forest and cattle loss.



The third meeting was held with the women of Gavcoul. In this meeting the consequences of cattle loss for the life and livelihood of the people was discussed in more detail.



In this meeting one of the women asked whether it was possible to propose solutions for these problems and suggested "artificial insemination of the native cows for crossbreeding".

Loss of financial and accessible capital and reduction of daily dairy products for the family were the most important effects of cattle loss on people's lives.

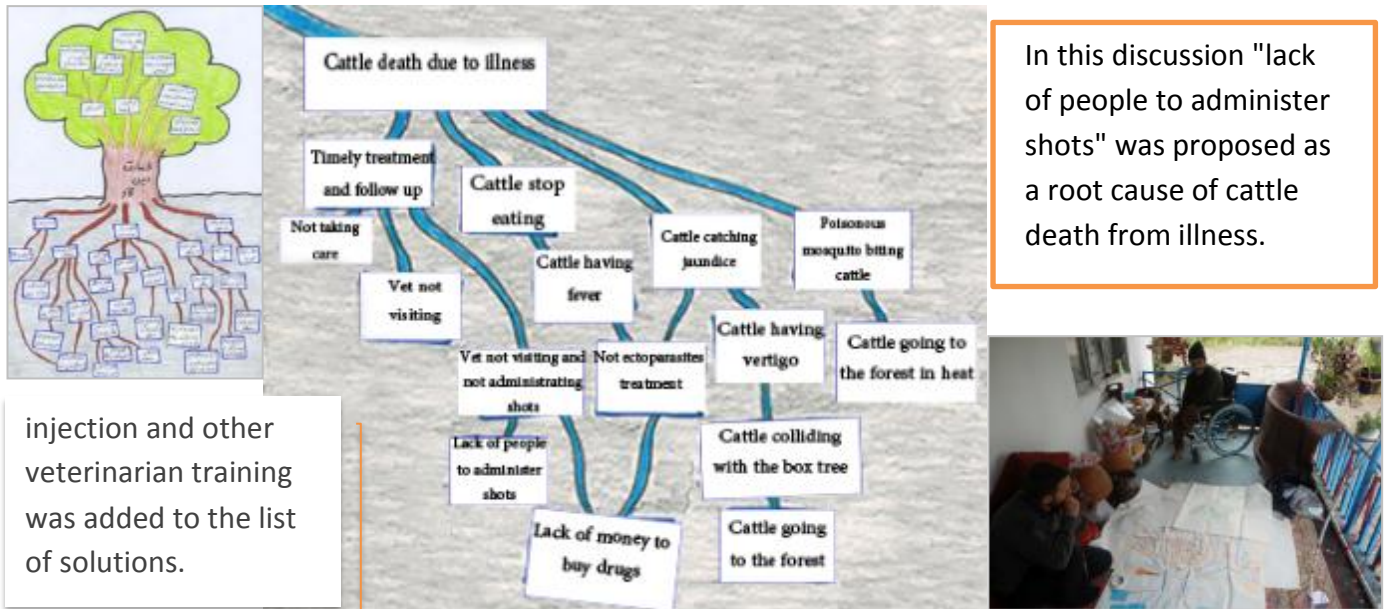


We considered showing the Tree drawn

in women's meeting in the men's meeting in order to discuss and analyse it. But the pace and flow of the men's meetings did not give us the opportunity to do so. As a result, we discarded this plan and started to take the Tree on rounds in other mixed meetings. We were careful that the Problem Tree should be going back and forth between the men's and women's meetings, so there would not be any misconception that men are supposed to approve of the women's analysis. Thereafter, the Tree was analysed mostly in family gatherings.

One of the marginal points in Problem Tree Analysis in the villages was the gender issue. During the project, we heard several times from the male villagers that "why are we discussing cattle loss with the women? They do not know anything about cattle loss." Once that we were supposed to hold a meeting with women after the men's meeting, the men objected again that why are we involving women on the issue? We showed them the Problem Tree Analysis, which had only been discussed in the women's meetings. When they saw the Problem Tree, especially the cards such as "reorganisation plan" and "evacuation of the forest," they said that women had done a correct analysis and had pointed out the right issues.

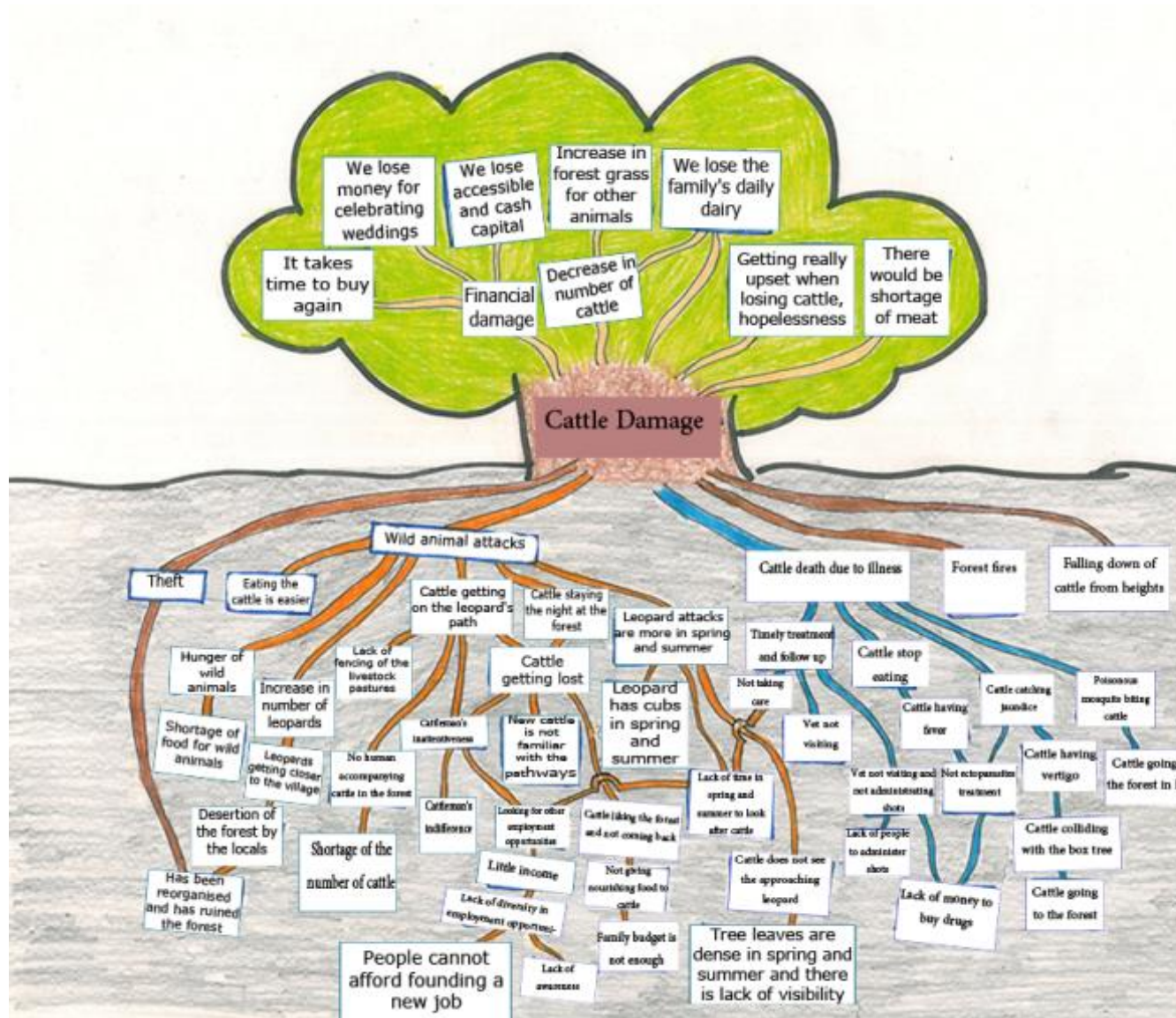
At one point we felt that the root of leopard attack had been focused on more as a root cause of cattle loss while other roots have been analysed less. On the other hand, employing the pair-wise matrix technique for losses, we remembered that for one of the locals cattle loss due to illness was more important. Therefore, we decided to discuss it further with him in order to have a more detailed analysis of the illness root.



We took the Tree to Hojjat Ilchi as he was recognized by all as a great cattleman. His cattle rearing techniques were more traditional relative to others and he lived in the forest. In the discussion with Ilchi, "cattleman's inattentiveness in cattle rearing" was proposed as one of the factors leading to leopards attacking the cattle. Before this the people considered both the causes of the problems and the solutions to them to be in the hands of government officials, but the proposal of this root cause in the Tree led to recognition of the role of the people in the issue. This card helped in the addition of root causes and solutions related to the people, which they could work on it themselves.

Afterwards, the Problem Tree was reviewed and analysed in the village coffeehouse among the men. One man considered "looking for other employment opportunities" as the cause of cattleman's inattentiveness. The addition of this card and investigating it opened the door for looking for solutions to diversify employment opportunities.

During the six to seven months that the Problem Tree was analysed and completed in different meetings in the three villages, the people criticised the previous statements, amended some of the links, or added new factors.



Besides completing the roots of the Problem Tree, the discussion gradually began on finding solutions to eliminate each of these root causes. These solutions were documented on a technique sheet and their impact on solving each of the root causes was determined. Most of these solutions either were employed by one of the participants themselves, had been heard that someone else had employed them, or they considered them as practical. These diverse solutions could help in decreasing the impact of one or some of the root causes and could thus result in less cattle loss in the village. However, it should be considered that these solutions are not conclusive, comprehensive, and universally applicable. Each of them could be appropriate for some of the locals but inappropriate for others, considering their differing conditions.

Solutions for Rearing Cattle in the Forest

"No human accompanying cattle in the forest" is one of the root causes leading to the cattle to move on to leopard's path and consequently leading to a leopard attack. To eliminate this problem, people proposed the following solutions:

- **Families rear the cattle together in rotation**

The families whose livestock share the same pathway would rear the livestock together in rotation; each day or each week, one family would be responsible to keep the livestock.

- **Using a shepherd for joint rearing of the cattle**

One of the other solutions to decrease the occurrence of this problem would be that a few families would pay a person to rear all their cattle in the forest as a shepherd.

- **Entrusting the cattle to someone else for rearing and keeping**

One of the old customs was that the locals in the harvesting season would entrust their livestock to someone to keep and in turn would pay him in cash or in rice. Examining the Problem Tree, some of the people suggested that this custom would help as a solution to decrease the cattle loss, especially in the harvesting season.

Solution of Rearing Cattle in the Barn Instead of the Forrest

In examining the Problem Tree by the locals, it was mentioned repeatedly that the presence of livestock in the forest results in theft, leopard attacks, or falling down from heights. People, thus, proposed the following solutions to rear the cattle in the barn instead of sending it to the forest:

- **Rearing crossbreeds**

It means rearing crossbreeds instead of native cows. Doing this would mean that the cows would stay in the barn in sight, thus dangers such as theft, leopard attacks or falling down heights would threaten them less.

- **Artificial insemination of native cows**

As buying crossbreeds costs a lot, some of the locals suggested that instead of buying crossbreeds, one would artificially inseminate the native cows and breed crossbreeds.

Creating Pastures for Cattle Grazing

People suggested determining a restricted space as a pasture to decrease the chance of the cow getting on a leopard's path. There is an example of a pasture in Tazeh Abad Village near the three targeted villages of the project, where its boundaries had been set by Natural Resources and entrusted to the people many years ago. Some locals saw it as a necessary solution to determine the boundaries of such space.

Solution for Timely Treatment of Cattle

One of the problems proposed as a root cause of cattle loss was "lack of people to administer shots" in the village. The locals believe that the presence of someone to administer shots in the village or training people on injections and drugs could solve this problem. People suggested two solutions for this:

- **Presence of experienced person to administer shots**

People from each village would learn how to administer shots so each village would have an experienced person. Therefore, when cattle in the village contracts illness, they could be treated faster and there would not be any need to bring someone from Sangar City or Sihakal City for administering a shot.

- **Training people on injections and drugs**

There would be a plan for training all the village population about veterinarian injections, drugs, and first aid. Therefore, if somebody's cattle contracts illness, he would be able to look after it and follow up on its treatment faster.

Solutions for Diversifying Employment Opportunities in the Village

From the village locals statements, "lack of diverse employment" results in "less income" and the cattleman would be forced to "look for other jobs" in order to supply enough income. This is one of the root causes of "cattleman's inattentiveness" and "cattle getting on a leopard's path." Consequently, people have suggested the following solutions for diversifying employment opportunities in the village:

- **Beekeeping in the forest**

Some of the locals stated that if beekeeping was set up in the forest, it would reduce another root cause of cattle loss in addition to increasing income and diversifying employment. The presence of beekeepers in the village would reduce the problem of "desertion of the forest by the locals," which had resulted in an increase in theft and the approach of the leopards.

- **Growing mushroom**

Growing mushrooms is one of the solutions that the locals could undertake which would help to increase their income. One local suggested that if people started to farm mushrooms in the forest and in tree trunks, a part from increasing their income, would result in their increasing presence in the forest and thus looking after their livestock better.

- **Vermicomposting in the forest**

Establishing a vermicompost, using special worms to decompose organic waste, such as fruit or vegetable waste, and turn them into a fertiliser. This fertiliser could be used for their own farming purposes as well as for selling and making additional income.

- **Second harvest (eg. rice, broad bean, herbs)**

Building a 500 Hectares Enclosed Space for the Leopards

In order to create an enclosed space for the leopards and to keep them away from the livestock, some of the locals suggested building fences to create such a space. This suggestion was put to Department of Environment by the local representatives. The Department of Environment official explained that creating such a large space would cause more problems for the locals, as they would not be able to enter or live in that space under any circumstances.

Solution for Prevention of Falling Down of Cattle in the Forest

The locals believe that identifying the valleys and pits as dangerous locations for cattle in the forest would help the cattlemen to keep their cattle away from these spots. After identifying these spots, the cattle entrance to dangerous routes could be prevented by building fences around the identified spots or putting obstacles on the routes to them.

Starting a Cooperative

In the discussions about cattle loss, some people suggested starting a cooperative. They believe that establishing a cooperative would help the people to buy the tools and food needed for their cattle for a more appropriate price.



Dorfak Newsletter



As mentioned in explaining the process of holding joint meetings, in our endeavours to set up these meetings, we realised there are still questions and ambiguities "about us" and "what we do in the village." Therefore, we decided to publish a Newsletter and simply answer these questions. This was how the first issue of Dorfak was published in eight pages.

Considering that we were aware of the fact that a considerable number of the locals are illiterate or have low literacy, we tried to design the Newsletter mainly based on visuals. For example, we narrated the story of our project stage visually on a story board from our entrance to the village up until that time of the project. In addition, during distribution of the Newsletter, if there was an opportunity we would read and explain the contents in summary verbally for the illiterate.



We distributed the first issue of Dorfak Newsletter house-to-house on the eighth trip to the village. This was a good opportunity to meet and talk to people we had not met before or could not have for some reason visited before. It led us to visit all corners of the village. The interesting point during distribution of the Newsletter was that we saw unfamiliar and new faces despite our one-year presence in the village.





In midst of all this, Zahra, one of the village teenage girls, gave us the feedback that she is not happy with her friend's photo and that it is inappropriate, in her opinion. Therefore, we discussed it with the person in the photo and her family in order to figure out what the cause of the problem is; but the family said they do not have a problem and they even think it is a good photo.

Due to this feedback and the discussions taken place, Zahra became more familiar with us and started to participate in the women's meetings. She took photos of the meeting, as we suggested. She published the photos under her name in the second issue of the Newsletter.

After the distribution of the Newsletter, the locals had some feedbacks on the photos and the content. It seemed they did not think that the photos taken with their permission would be published and reach them in this way. So after publication of the Newsletter, they realised how the photos taken during the meetings are used.

The news of the Newsletter's distribution spread faster than itself. Before distribution of the Newsletter in Gilbaam and Chelgacheh, the news of it had already reached there and the locals were waiting to see what had been published with their photos.



This Newsletter led to new discussions among the locals themselves as well as with us and more transparent discussions about us and what we are doing in the village took place. Some people asked us to set up meetings and inform them so they could participate while others asked us the time and place of our next meeting.



Holding joint meetings and the need to report to people on them led to publication of the second issue of the Newsletter. Considering our general approach that the locals were the owners, we tried to involve them in the process of production of the Newsletter, so gradually there could be collaborations in writing and publishing it. Therefore, instead of publishing and distributing the final draft of the Newsletter, we prepared a first draft to share with some of the locals and ask their opinions on it and implement them.

The people chosen to share the first draft with were from two groups: some were people who had shared their criticisms or opinions on the first issue, others were the participants in the meetings which were being reported on.

"In the last issue of the Newsletter you had understood general stuff, but in this issue you have said it in more detail."

"It's great! This time the Newsletter is much better."

You have not mentioned the Village Council, definitely thanks are in order..."

"In the article *Finding Root Causes to Cattle Damage* write 'theft of livestock' instead of 'theft', so it would be clear what you mean."

After corrections by the people, the second issue of the Newsletter was published in eight pages. This issue was also distributed going house to house, but this time we put some Newsletters in village public places, such as shops and coffee shops. This resulted in some people from neighbouring villages asking for it and wanting to read and follow its content.



Throughout distribution of the two issues of the Dorfak Newsletter, some of the locals gave us accurate feedbacks and suggestions. This gave us the idea to create a planning team for production of the next issue. We set a meeting with two young village men who had become more involved with the contents of the Newsletter. We planned and shared responsibilities for the next issue besides discussing the process of production for each issue. Alongside the local plan for the contents of the third issue, the project team also added its content. The new content was discussed with the local team and the content of the third issue of the Dorfak Newsletter was set by agreement between the local and

project teams and a new division of responsibilities was done. A member of the local team volunteered to write an article on conditions of rearing cattle and hygiene in the place of rearing cattle. Another member also volunteered to find a nature poem in Gilaki to publish in the Newsletter.



At a certain stage of the project, many meetings took place in the space of one month on the issue of cattle loss. It was necessary to share the contents of these meetings with all the people as soon as possible. This was due to the possibility of some people being left out and not being able to connect to the project later because of the quick progress and the large number of meetings. Therefore, between publication of the second and third issues of Dorfak, a special issue to inform everybody about the meetings was published. In the two page special, a summary of the contents and decisions taken during the meetings was given and the locals were invited to attend the next meeting. This special issue was distributed with the help of some of the locals and through village shops, taxis, and coffee shops.

خبرنامه درفک

اطلاعیه جلسات - آذرماه ۹۲

با توجه به اینکه در یک ماه گذشته در روستا جلسات زیادی در خصوص مشکل خسارت دیدن گاو برگزار شده است، لازم دیدیم برگزیده‌ای جهت اطلاع اهالی درباره اخبار این جلسات منتشر کنیم.

این جلسات کمک کرده است تا اهالی نظرات و تجربیات خود را در مورد مشکل خسارت دیدن گاو با مسئولین در میان بگذارند و صحبت‌های آنها را نیز بشنوند. این جلسات قرار است در چند ماه آینده ادامه پیدا کند. حضور هر یک از اهالی روستاهای گاوکول، گیل‌بام و چل‌گنجه کمک می‌کند تا نظرات همه شنیده شود و راه حل‌های مناسب‌تری برای کاهش این مشکل به دست آید.

نشست اهالی روستا با مسئولین محیط زیست

به درخواست مردم و با پیگیری آقای ایرون، دبیر روستای گاوکول و آقای ترمیسی رئیس شورای روستای گیل‌بام، مسئولین اداره محیط‌زیست سیاهکل در جمع مردم روستا یکشنبه ۱۹ آذر ۹۲ در مسجد گیل‌بام برگزار شد و در آن ۲ نفر از روستای گیل‌بام به همراه حاج آقا رسولی حضور داشتند. در این جلسه مردم حمله پلنگ به گاو امکان برداشت خسارت و انتظاری که از یکدیگر دارند

چهارمین جلسه جمعی اهالی در مسجد

در این جلسه مردم دور هم جمع شدند تا صحبت‌های مطرح شده در و در مورد راه‌های پیشنهاد شده توسط اهالی برای کاهش خسارت ساعت ۷:۳۰ شب جمعه ۸ آذر ۹۲ در مسجد گیل‌بام تشکیل شد. این جلسه حضور داشتند: حاضرین در پایان جلسه توافق کردند که دو

۱. نمایندگانی از مردم به دیدار رئیس محیط زیست سیاه کلنگو کنند. آقایان اردشیر ترمیسی، گل‌باز ایلی، امین برهان دینطلب شدند.
۲. جلساتی با اداره جهاد کشاورزی سیاهکل در روستا برای کاهش مشکل خسارت گاو چه کاری می‌تواند انجام دهد روستای گیل‌بام مسئولیت پیگیری و هماهنگی جلسه را به عهده

دیدار نمایندگان مردم با رئیس اداره محیط زیست سیاهکل

روز دوشنبه ۱۱ آذر ۹۲ آقایان اردشیر ترمیسی، گل‌باز ایلی، ارسلان دهشتی، سیروس ایلی، امین برهانی و ابودر بهتری به نمایندگی از مردم، به همراه آقای سلیمانی به اداره محیط زیست سیاهکل رفتند. در این جلسه در مورد همکاری مشترک بین اداره محیط زیست و اهالی روستا برای کاهش مشکل حمله پلنگ به گاو گفتگو شد.

دعوت به حضور در جلسه جمعی پنجم

به اطلاع اهالی محترم روستاهای گاوکول، گیل‌بام و چل‌گنجه می‌رساند، پنجمین جلسه جمعی جهت برنامه‌ریزی و همکاری برای حضور جهاد کشاورزی در روستا برگزار خواهد شد.

تاریخ: شنبه ۲۴ آذر ۱۳۹۲

ساعت: ۷:۳۰ شب

مکان: مسجد ابودر گیل‌بام

در این جلسه در مورد مسائل زیر صحبت می‌شود:

۱. گزارش دهی توسط نمایندگان مردم از دیدار با اداره محیط زیست و اداره جهاد کشاورزی
۲. برنامه‌ریزی و همکاری برای حضور اداره جهاد کشاورزی در روستا



By the end of the project, the final issue of the Newsletter had to include the conclusion of the work by the project team. Therefore, we interviewed the knowledgeable and experienced people on the suggested solutions for eliminating roots of cattle loss. At the end, according to our plans, third issue of the Newsletter was published for the project team's last trip to the village in sixteen pages.



The third issue was also distributed house to house in order for us to find the opportunity to say goodbye to each of the locals.

Also, this time more Newsletters were put in the village shops and coffee shops so people would have access to them in our absence.

Sections of this issue were produced with the locals' cooperation. Namely, the photo on the first page which was related to completion of the Map of Natural Resources in the Local Discussion Room. This photo was taken by one of the village young men.

خبرنامه درفک
شماره سوم - بهمن ماه ۱۳۸۲

حکایت همچنان باقیست

در این مدتی که در روستا حضور داشتیم چیزهای فراوانی از تک تک اهالی آموختیم، بحثها و گفتوگوهای زیادی داشتیم. نشست و برخاستهایی کردیم. سر یک سفره نشستیم، درد دل کردیم و فرد دل شنیدیم. بروی یک موضوع بیشتر که که هر به کار و زندگی ما ربط داشت و همه به کار و زندگی مردم مربوط بود گفتگو کردیم. با مردم در برنامه‌ریزی‌ها، همراهی و همفکری کردیم تا از این طریق راه حل‌هایی که برای کاهش خسارت گاو در روستا وجود دارد را بهتر بشناسیم و درباره آنها با مردم صحبت کنیم. در خبرنامه پیش رو سعی کردیم بخشی از این مراحل را معرفی کنیم. برای همین با کسانی که تجاربی دربار این مراحل دارند مصاحبه کردیم تا همه بتوانند از اطلاعات و تجربه آنها استفاده کنند.

دانشان کار ما در روستا در حال تمام شدن است اما حکایت خسارت گاو همچنان ادامه خواهد داشت. قبل از آمدن ما به روستا مشکل خسارت گاو وجود داشت بعد از رفتن ما نیز متوقف نخواهد شد. قبل از آمدن ما اهالی کارهایی برای کاهش یا جبران خسارت انجام می‌دادند بعد از رفتن ما نیز این کار را ادامه خواهند داد. اما این امید وجود دارد، راهی که توسط خود اهالی از یک سال پیش آغاز شده و گرایش توسط خودشان انجام شده، پیگیری شود و به سرانجام برسد.

فراوانش بکنیم برطرف شدن مشکل خسارت گاو موضوع مهمی است اما



Throughout the project we tried to give Newsletters to governmental bodies in their meetings with us or the locals, in order for them to be informed on the activities and work done in the village. For example, the General Manager of the DoE said "you have addressed really good questions, questions which are on people's minds. You have been successful in talking from people's perspectives."

When the third issue of the Newsletter was given to the SSO official, he carefully read an interview of one of the locals on insuring livestock. He also asked for the previous issues. Reading the Newsletter and finding out about the activities done in these three villages led them to ask to the village and answer people's questions.

Starting the Local Discussion Room

□ **The connection of Badi'-ullah's storage room to the process of working with the local community**

Although a year had passed from the beginning of the project, due to the distance between the targeted villages and also due to locals being busy, it was still difficult to go house to house and communicate face-to-face. On each trip we spent a considerable amount of time going to the furthest parts of the village. Although this was not fruitless, we were still concerned that the issues discussed might be related to some who have not been able to collaborate. Therefore, we were looking for a way to show the technique sheets in different gatherings, which would be more inclusive. This would result in firstly, collaboration of people who had not seen the analyses till then and, secondly, for those who had participated in different stages of the analyses to follow up on their own and other people's analyses.

□ **The geographical location and social status of a shop**

We gradually recognised that the Saman Grocery Shop belonging to Badi'-ullah Alipour is one of the appropriate places for small meetings and exchange of news and information. This shop was located at the road entrance of the three villages and was itself a place of local traffic. Besides, the shop owner was a sociable and talkative person and this quality resulted in discussions and circulation of news in the shop.

Sometimes when we were passing by the shop, conversation would start about the project with the people in the shop. Consequently, the idea of using the adjacent room to the shop as a place to display the technique sheets came to mind.



□ Evaluating the idea of opening the Discussion Room

One of the sheets that had to be put on public display was the Map of Natural Resources. Some of the locals had recorded their cattle grazing pathway on this map in order to find a way for joint rearing of cattle. For better analysis, it was necessary for more cattlemen to identify their cattle grazing pathway.



Beginning of November 2013 (mid-Aban 1392), we installed the Map of Natural Resources in the room adjacent to the shop. After the map installation, many people saw it and added points to it. This was a good experience in terms of analyses becoming more complete during the time we were not present in the village. In addition, individuals who were hard to access or hardly would participate in a meeting together, managed to participate in the analyses together in a shared space.

Due to this experience, the idea of providing the place for public presentation of technique sheets and group analyses began. Additionally, the rooms next to the mosque and village council could have been appropriate places to hold meetings and discussions. Therefore, we decided to evaluate this idea by talking to some of the locals and the shop owner. We talked to the shop owner and he agreed to voluntarily prepare the adjacent room for this purpose. We decided to further discuss the plan for its execution and talk again on the subject.

We examined our own hopes and worries about the formation of the Discussion Room in a separate meeting within the project team. Afterwards, in a meeting with the shop owner we discussed our hopes and worries and listened to his points as well and jointly planned for the establishment of the Discussion Room. In this meeting we appointed tasks and responsibilities; some were to be done by the shop owner and some of the locals and others by our team.

□ Preparing the Local Discussion Room

One task was to install an information board on the outside wall of the Discussion Room.

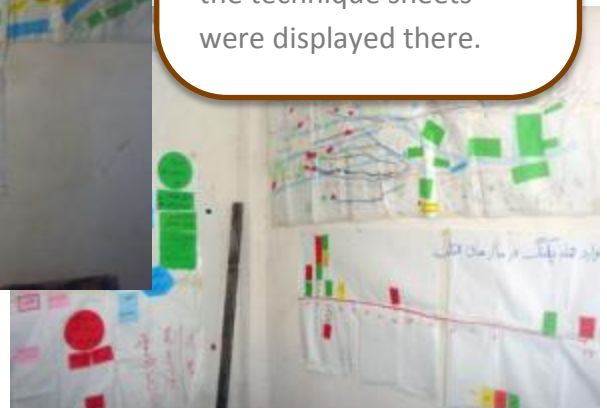


The board was made and installed with the help of some of the village youngsters. It was decided that from then on the notices and announcements for project meetings and news would be displayed on this board.

After installing the board, the locals said that the room should have an appropriate name to illustrate its function. Thus a paper was pinned on the board so the locals could write their suggestions for the name and then they could vote on it. Five names were suggested by the locals and the "Local Discussion Room" got the most votes and was chosen as the final name.



Thereafter, the room, which was mostly used as a storage room before, was cleaned and prepared with the help of some of the locals and the technique sheets were displayed there.



□ The Function of the Room

In addition, the Room could be used to hold meetings in. Since it was sometimes time consuming to organise the meetings in the mosque and the village council, and sometimes the intended meetings could not be organised on time, the Room could be a good replacement. Thus, we decided to hold an official meeting there to evaluate this function with the locals' assistance. Therefore, with the help of some the locals, the Room was prepared and the last joint meeting of the project was held in the Local Discussion Room.



By the end of the project's official period, we decided to leave the technique sheets of joint analyses, which belonged to the locals themselves, in the village in order for them to be accessible to everybody and become useful in the follow ups and future projects. The Local Discussion Room was an appropriate place for this. Consequently, the joint planning technique sheets, the Map of Natural Resources, and the Social Map were installed in the Room. In order to make the sheets more comprehensible, a visual report of the production or formation of each sheet was also placed next to it. At the moment, everyone has access to the conclusions of the meetings, anything which happened in relation to the project, and the discussions on cattle loss in the room.

The Local Discussion Room, a Symbol of the Generation of Joint and Collective Discussions

There always has been concern around how much the existence of a public room in the village can create the space for collaboration and discussion among the locals and the basis for joint action benefiting all. So much that in some cases the financial resources of various projects would be spent on creating such a space. However, we did not aim to establish such a space from the beginning in this project. Although we aimed to identify public spaces from the beginning, but as discussed above, we decided to strengthen face-to-face contacts by going on rounds to the local houses. We also tried to facilitate joint analysis regarding life and livelihood in different areas of the three villages by providing opportunities to gather people in the same meeting.

The necessity of forming an accessible joint space and its requirements gradually became clear with the rising number of meetings and discussions, as well as participation of a wider socioeconomic spectrum in the analyses. We were actually witness to a dynamic process of formation of a physical and social space for discussion and collaboration between people who due to their diverse livelihoods and also due to the history of the interaction in the past, would rarely gather for joint analysis and decision making.

Therefore, when the idea of the Room was put forward, it was not alien to the locals. It is possible to consider the formation of the Local Discussion Room as a symbolic illustration of the value of coming together of the locals to discuss their common problems; not only for the people of one village but the people of different villages with the same problems.

In this project a collection of findings, outputs and outcomes have been obtained. In the chapters on each of the processes, findings, their interlinkages, and their role in determining the next stage have been discussed. However, outputs and outcomes are usually not the result of a single or individual event, but a group of interconnected actions and processes have played a role in their attainment. In this chapter, a description of them is given.

Outputs

The outputs are a result of activities done throughout the project. From the beginning of the project and the initial measures in the field, gradually certain outputs are attained. The numerous outputs of this project, which are the result of one or many activities, are as follows.

- Reaching a joint analysis of the cattle loss and leopard attacks accounting for all its complexities and interlinkages;
- Analysis of leopard attacks based on the place and living conditions of the local families using methods such as social mapping, employing the loss matrix, and mapping of natural resources.
- Identification of different levels of conflict due to spatial situation, livelihood circumstances, etc.;
- Production of a collection of information about instances and circumstances of leopard attacks in local community plotting the map of most affected areas of leopard attacks;
- Finding the root causes of cattle loss in detail, so each institution can identify its role or come up with appropriate solutions;
- Reaching a collection of solutions appropriate to the root causes/ main factors of conflict with leopard accounting for the place and living conditions of the local people. This includes solutions;
 1. to compensation for cattle loss due to leopard attacks or other factors;
 2. rearing cattle in the forest;
 3. keeping cattle in the barn and not taking it to the forest;
 4. diversifying job opportunities (jobs which could replace rearing cattle or as a source for minimising the impact of cattle loss on the family livelihood and
 5. timely treatment of cattle in order to minimise casualties.
- People reaching an action plan to reduce the problem of cattle loss (CATWOE, Activities and Timeline)
- Devising CATWOE with the Department of Environment to protect leopards
- Devising CATWOE and the map of camera installations and determining the fenced area for the leopard with a group of cattlemen
- Publication of local Newsletter during different stages of the project in order to circulate information among those involved
- Establishing Local Discussion Rooms as a place of collective discussion and analysis

Outcomes

When approaching the end of the project, clearer outcomes could be expected. The outcomes are actually the consequences and changes occurring due to the process or outputs of the project. What we have considered as outcomes in this project are as follows.

A. Outcomes due to one output or a combination of outputs are

- Changing the issue of leopard attacks from concerns and rumours to a subject to be discussed in the public arena
- Creating understanding between people and the Department of Environment of each other's analysis and perception on the issue of leopard attacks
- Introducing the locals to some of the government officials, their responsibilities and the role they can play. For example, one of the village locals, when discussing the advantages of this project, said "this has resulted in the locals getting acquainted with some government officials personally. For example, they realised that they can report to the Department of Environment as some people were not aware of this before".
- Establishing cooperation between the locals and governmental bodies
- Introducing and providing information on some of the public services, such as the stages and conditions of insuring cattle or lessons on veterinarian services, which Agricultural Jihad can set up.
- Providing information on the existing experience on reduction of cattle loss in villages through publication of interviews with the experienced locals in the Newsletter.
- Publicising the proposed solutions as well as suggestion for their execution among the local community through Newsletter publication.
- Circulation of information and connecting the village locals to the process through the Newsletter
- Specifying and clarifying the role of some of the real actors of the issue of cattle loss
- Involving some of the locals in editing and planning the contents of the Newsletter and writing of one article for the Newsletter by a local
- Devising of a plan for determining the fenced areas for leopards and cattle by a group of locals



Wider impacts

Wider impacts are events occurring under the influence of the project without being necessarily planned for or expected. Usually these impacts occur after the end of the project. However, it should be considered that this process is not necessarily linear and wider impacts or signs of them could be expected during the process of the project, as we witnessed one of them during the execution of this project.

- After setting up the meeting with Social Security Organisation, suggested as an activity in the plan by the village locals for reducing cattle loss, one of young villagers took on the responsibility of sharing insurance conditions and procedures with others after a conversation with Social Security Organisation representatives. After this information was presented in a planning meeting, one of the cattlemen who had suffered cattle casualties as a result of leopard attacks managed to insure his cows after going to Social Security Organisation and following the procedure.

B. Outcomes due to the process of implementing the project are

- Practicing a collective process for solving problems in local community
- Women's involvement and participation in analysis and comprehension of cattle loss
- Identifying and involving existing potentials in the local community to play a role in reducing cattle loss, such as:
 - one of the cattlemen who was not accessible in the beginning but became a permanent participant in the meetings and map-drawing sessions.
 - the young person from the village locals who wrote an article on rearing livestock in the Newsletter
 - the shopkeeper, as a person with a large network among the locals, who played an important role in formation of the Local Discussion Room
- The Department of Environment encountering a new methodology in the field of wildlife preservation which were novel in the following ways
 - the different role played by an NGO as the facilitator of the problem solving process.
 - the precise and proper analysis of the issue by the locals as people who own the issue.
 - the new and altered position of the locals as experienced instructors, and not uninformed individuals in need of education.
- Taking roles and responsibilities by some of the village locals in different stages of the project such as following up and organisation of some of the meetings and visits by government officials
- Formation of dialogue as well as serious and face-to-face discussions between the locals and the project team concerning the issue of conflict and protection
- Formation of trust among a group of locals to share their knowledge and experience with others
- Formation of trust among a group of locals to share instances of leopard attacking their cattle and documenting them
- Illustrating the novel role of an NGO in the field of wildlife protection
- Participation and involvement of some of the serious leopard attack victims, who were hardly accessible and cooperative, in the process of project
- Involvement and helping of some of the locals in the process of starting up and formation of the Local Discussion Room, using local facilities and assets for holding meetings and public presentation of the analyses

Opportunities and Leads

There are multiple opportunities created and leads found, which can be followed up and implemented in the future, as a result of the process unfolded during this project. Some of these opportunities and leads could be pursued by the local community because of the fact that the different stages of the project, namely planning, follow ups, initial consultations were done by the locals themselves and have reached a stage where they could continue without an outsider facilitator. However, some other tasks are in initial stages, meaning the first steps have taken place but the collaboration of the facilitating team of the project is still needed for the next stages to be executed by the locals and other actors.

The information on all these opportunities and leads have been presented to all the locals through the Newsletter, meetings, and face to face discussions so everyone could pursue them and help in their execution according to their own capacities and interests.

The subject of different levels of dependency on an outsider facilitating team for each of these opportunities and leads is similar to the issue discussed during devising the project plan in the CATWOE¹ framework. While discussing CATWOE, or specifically the Worldview of the project, we defined the Owners as a combination of "facilitating team/locals", as we were aware of the fact that in the initial stages of the project we were the owners responsible for the Transformation; although we expected the process to unfold in a way that the responsibility of the project would fall to the locals and they would be the owners. It seems that the group of opportunities and leads under Section A of the outcomes above, this process has almost taken place or the context for it has been prepared; but this has not occurred for the opportunities and leads in Section B. For this group of opportunities and leads the move from "facilitating team as owners" to "locals as owners" is still in its infancy.

A. Leads that could be pursued and executed by the locals:

- **Clarification on insurance regulations**

There are some questions and ambiguities regarding conditions of insuring livestock and getting compensation in the event of leopard attacks. Although insuring cattle is not something new for the locals and some of them have previous experience of it, there still are some problems and ambiguities regarding adaptation of insurance conditions to the locals' living circumstances in this area. Namely in some instances the insurance regulations do not include loss due to leopard attacking cattle. Consequently, in public meetings the locals said they wanted to set up a meeting with the insurance people in their village so they could discuss the issue and answer the questions and clarify ambiguities. One of the village locals took on the responsibility of organising and setting up this meeting. In the first step, the locals' representative presented some information to the others in one of the meetings on different types of insuring cattle, necessary documents for it, and the expenses for each type of insurance. Thereafter, in the meetings of insurance people with the locals' representative and the representative of the project team, reports of what had happened in the village as a result of the project were presented. These negotiations encouraged the Social Security Organisation to present and describe insurance regulations to the locals in order to assist them in the progress of reducing or compensating losses.

- **Defining cooperation with Agriculture Jihad**

During negotiations with Agriculture Jihad as one of the actors in the issue, they were prepared to help the reduction of cattle loss due to different causes, including leopard attacks, according to their defined official responsibilities and services.

- _ It seems in order to receive compensation for loss due to leopard attacks, cattlemen should meet certain conditions, or they would not receive any compensation. Agriculture Jihad could supervise insurance regulations and alter them if needed.

- _ There are certain conditions to receiving loan from Agriculture Bank to buy cattle which encumbers or discourages the locals to take the loan. Changing or adjusting loan conditions is under the authority of Agriculture Jihad and could be negotiated.

- _ Agriculture Jihad could also set up free educational classes on livestock diseases and veterinarian services.

- **Determining leopard fenced area in the forest**

With the progress of analysis of Map of Natural Resources, some of the cattlemen suggested if we go to the forest we can see the parts shown on the map. Subsequently, it was decided that two cattlemen along with the representative of project team do a transect walk at a proper time. On the other hand, as a result of cooperation between the locals and Siyahkal Department of Environment, they suggested that they could install cameras in the forest in order to identify the places of increasing leopard presence and inform the locals on it. Therefore, initial planning was done with cooperation of some cattlemen and the executive stages were defined. At the end of the project, this plan was delegated to one of the cattlemen which can be followed up with the Department of Environment.

- **Continuation of publication of local Newsletter in the village**

The Newsletter became increasingly local, inclusive, and relatable during the process of producing it, which involved using the locals' feedbacks and suggestions throughout publication of the three issues. On the other hand, the group of the Newsletter team consisting of some of the village youngsters was formed, who were involved in stages from initial planning in producing Dorfak Newsletter to writing of an article by one of them in the last issue of Newsletter. It seems that this team has the potential to be supported so the publication of the Newsletter could continue in the village.

- **Joint rearing of cattle**

One of the suggested solutions to reduce leopard attacks to cattle was joint rearing of cattle by cattlemen using the same grazing pathway. This solution used to be employed by some of the village locals but is not currently prevalent due to lifestyle and livelihood changes. During discussions on solutions to cattle loss, some suggested that they could still do this or have a plan for doing it.

To do this, each cattleman drew their grazing pathway on the Map of Natural Resources drawn by the locals. This map, which is now installed in the Local Discussion Room, could provide the basis for discussion, cooperation and collaboration between the cattlemen who use similar pathways for cattle grazing.

- **Changing the Local Discussion Room to permanent discussion place in the village**

The geographical location of the Local Discussion Room in the village as a place of passing and sometimes gathering of the village locals, combined with the role of the shopkeeper in exchanging information and news between the locals, has resulted in meetings and discussions taking place in this location. Continuation of this process in the Local Discussion Room could change it to a place for discussing and analysing the cattle loss issue or other village problems.

- **Determining the grazing area**

Another solution suggested to reduce cattle loss, especially loss due to leopard attacks, was determining the grazing area, a specifically fenced area for cattle grazing, with collaboration of Iranian Agricultural Engineering and Natural Resources Organisation. Considering that this has occurred in a nearby village, the possibility of its execution is not low. Also, considering the processes taking place during this project and the interactions with other organisations, it seems that the village locals can establish a connection with IAEO and discuss the feasibility and conditions of executing this solution.



B) Leads that would depend on the project team's facilitation in order to materialize

- **Achieving a joint plan for managing the conflict between people's cattle and livelihood and leopards**

Subsequent to the interaction that took shape with DoE, initial steps were taken to derive, with them, a CATWOE and plan for managing conflict to complement the local people's plan. The DoE plan remained incomplete when the project time came to an end. This plan has the potential to be completed and help identify commonalities with the CATWOEs of the local community and the project team. The integration of the three plans into one could provide a base for the collaboration of these three actors towards reducing the conflict.

- **Forming of meetings for transferring experiences**

Interviews were carried out with experienced local people in order to better understand how some of the solutions proposed for reducing the cattle-leopard conflict, and these were published in the newsletter. Afterwards, gatherings can be organized amongst people who put into practice some of these solutions, helping to enhance their effectiveness and efficiency, and remove some of the existing constraints.

- **Formation of a plan for participatory technology development (PTD)**

The initial step of a PTD fair could be to provide opportunities for sharing ideas and solutions for reducing conflict. These could include local people's experiences as well as solutions utilized for reducing losses in other areas of Iran and the world. These ideas can then be experimented with by the local people to ultimately adapt appropriate solutions to their own conditions.

- **Database on leopard attacks on cattle**

Information related to leopard attacks on cattle has been recorded on the resource map for some of the families and households. The trend of leopard attacks in different years and seasons has also been analyzed. Completion of these types of information can make up a database on cattle losses resulting from leopard attacks.

- **Interaction with other actors related to the issue**

Dialogue with other organizations like the Agriculture Bank and the Natural Resource Department – who were identified as relevant actors in the local people's plan – can lead to new opportunities for solving the conflict problem or for removing some of the existing obstacles and constraints. The interaction that has taken shape between the local people and departments such as DoE and Agricultural Jihad can be reasons for optimism.

- **Drawing up of an action plan for the solutions proposed by the local people**

The solutions derived in the process of the project have the potential to be articulated in the form of action plans, which could include sheets on the solutions' flow diagram, CATWOE, required resources, and pros and cons. These could all be worked out with groups who volunteer to implement the solutions. The pros and cons of rearing crossbred cattle and of delegating cattle herding to another cattleman in the farming season has been completed by local people with experience of carrying them out, but the other analyses related to the action plans can be considered for the future.



Sustainability

The process that took throughout two years in these three villages is expected to survive after the project team leaves. Throughout the project we tried to rely on the local community's potentials for all the stages and be less dependant on outside resources. Therefore, it is expected that some of them would continue in the future, whereas worries exist around the sustainability of other project outputs and outcomes. In this chapter of the report, the issue of project sustainability is examined alongside discussing factors sustaining the process and ones hindering its sustainability.

Factors making us hopeful of sustainability of the outputs and outcomes of this project:

☞ The analyses done in the process of the project at all stages, from the need to analyse and examine the issue to suggestion of solutions, was based on local capacities, understanding and knowledge. There surely is nothing that we or other outsiders as "experts" have added to or induced in the process.

The solutions suggested in the project are based on locals analysing the issue themselves and have been designed considering the existing realities of the local community. We consciously avoided outsider "prescriptive solutions".

☞ Finding the root causes to the cattle loss issue and the suggested solutions are reflective of the diversity of lifestyles and livelihood in local community. This makes us hopeful that the process of analysis and finding solutions included a large spectrum of the locals, thus due to this inclusiveness the locals would carry on with the analyses and solutions.

☞ All the stages of organisation and follow ups to set meetings and shape collaboration with the governmental bodies, from start to finish, were done by the locals themselves, even when we knew if we did it, it would be done faster.

☞ The locals trusted the project team to share their information. Also, they were sure that they owned this information and are the decision makers about this information.

☞ Necessary preparations to organise the meetings were based on the tools, approaches, resources and capacities of the local community.

Factors making us worried about the sustainability of the outputs and outcomes of this project:

- Governmental bodies' attitude towards the locals' decisions and plans - not taking them seriously, not collaborating with them, and looking down upon them.
- The signs of pessimism towards team-work among some of the locals.
- The local pessimism towards accountability and collaboration of governmental bodies.
- Application of decisions and execution of plans by the Department of Environment to protect leopard which would not be in line with the locals' plans and the approach of the project.
- The local plans to solve the cattle loss issue by devising CATWOE and designing activities has not been discussed and evaluated in different groups enough.
- There are still doubts among the locals regarding their own capacity to solve the issue. Rather than taking their own capacities seriously, they are still expecting the government to do something.

5

Our Experiences

Experiences and Lessons Learnt

Being part of this project as facilitators has taught us some lessons and experiences. Some of these experiences were the result of employment of a different approach in comparison to our previous experiences in the field of wildlife protection, while others were due to the unique social and cultural context of the community where the project was carried out. Each of these lessons could help us to both better comprehend the wildlife protection issue and the conception of protective solutions in future endeavours.



Experiences Gained from the Social Context of the Local Community of Targeted Villages

- The local damage despite having its own mechanisms for minimising loss, conceive a big role for the government in minimising or compensating loss. Despite the fact that many things are done without the government's involvement or even its intervention, there is still this perception that problems will not be solved without the government.
- Outside experts and specialists have continually looked down upon the local damage, leading to the locals underestimating their own experience, knowledge, and capabilities. For example, when the locals are asked about team-work in their villages they say that nobody does team-work here, but when the examples are recorded on paper they realise that real and worthy instances of it exists. Also, when they first claim that they cannot draw maps, when it actually comes to doing it and they get the opportunity, they are very familiar with their surroundings and can record their information with detail on a map they have drawn themselves.

Lessons on the Issue of Leopard Protection

- Priorities of the local community differ and sometimes oppose the priorities of the environmentalists. While we say the priority is protection of leopard, they state that the priority is preventing cattle loss. We claim something should be done for the leopards, they maintain that we should think of the cattle. In a situation like this, an approach in which both groups search for joint solutions should be chosen so everyone would benefit from it.
- The problem of leopard attacking cattle cannot be examined alone. Reasons of cattle loss are interdependent and interconnected. If the aim is to fundamentally solve the problem of conflict with leopard, a comprehensive analysis of cattle loss from different perspectives is needed. It might be that the clue to reducing leopard harming cattle is somewhere else.
- Cattle is the villagers' main capital, such as our possessions and bank accounts. They will confront anything threatening this capital. The relationship between leopard and the locals' cattle is like the relationship between thief and our possessions. As much as we are troubled and angered by thieves, we cannot expect local people to have a positive view of leopard or like it.
- One single solution cannot respond to the diversity of people's lifestyles and livelihoods. A set/group of solutions would help for each person to have an option/ options suitable to his circumstances. If the local lifestyle and livelihood diversity is taken into account and sought from the beginning, then this diversity would be taken into account when conceiving solutions.
- That people's lives are tied to nature is something used a lot in many projects and justification of using a participatory approach by the environmentalists. We also use it a lot but the truth is until one gets into deep layers of comprehension this does not become tangible. We have no proper comprehension of the level of connection between people's lives and nature and their dependence on nature. Probably the most tangible example of this sentence that we knew of was the impact of leopard attacking cattle on people's lives, but one night that we were guests of one of the locals, we encountered a more hidden layer. The host as he was serving us dinner, which had walnuts as an ingredient, was frustrated with the squirrels and cited them as responsible for the quality of the food. He was saying that the squirrels have eaten all the good quality walnuts in the forest last year and have not left us anything.
- The leopard conflict issue is a complex problem which is tied intimately with people's lives. It has been developing for many years to get to the current situation. Thus, a big change and a tangible result in a short period of time cannot be expected. In working with the local community if the aim is capacity building, one should not be result-oriented. Perhaps the most important measure of effectiveness is the breadth and endurance of the events of the process.



Experiences Gained from Facilitating the Project

- At the beginning of the project, we changed our approach based on our primary understanding of the region, but we did not change the time needed accordingly. Two years might seem enough for an educational project but it is short for a capacity-building process.
- Our role as facilitators in the process was strange and incomprehensible to many. It seemed like each person expected us to support an interested party. The Department of Environment expected us to take on their roles because of the people's trust in us and justify that the Department cannot pay financial compensations. Our colleagues in the Cheetah Community expected us to be more concerned with leopard protection rather than local cattle. People asked whether we supported the cattlemen or the leopard? But if someone would want to think about this question impartially, it would be difficult to respond and to take sides with one interested party. Solutions reducing the conflict between the cattlemen and leopard should be sought so maybe someday, as people stated in planning meetings, a change would occur so "both the cattle would not be lost and leopard would be protected."
- From the beginning of the project, attention should be paid to all the different groups of the local community and a connection should be established with them. Any decisions made during the project could affect everybody's lives, whether they have cattle or not, or whether they have endured losses or not.
- Establishing a connection with the local community is time consuming. According to each person's characteristics and mentalities the approach to establishing connection should be different and diverse. This is not possible without proper understanding and continuous relationship with the local community.
- When you first enter the community, you think that talking about leopard is easy and to solve the conflict you can cooperate with them. But it is not easy as entering these deep layers takes time. As killing leopard is a crime and has a fine, talking about it is a sensitive issue. People are not prepared to talk comfortably about the conflict they have with leopards.
- There is always the danger that we as outsiders analyse and plan on the issue based on our own perception, but what happens is different. For example, we expected it not to take much time from the inception of the idea by the locals of drawing the map of leopard fenced area and installation of cameras until its execution. However, this idea did not materialise even till the end of the project. We also fell into the trap, meaning that we were sometimes angry at the local community, sometimes disappointed that everything has not gone as we anticipated. However, what we learned was that the project is not supposed to go as we have analysed and anticipated, but the plan should proceed while adapting to the natural way of people's lives.
- We as outsiders/specialists are in a hurry. Our lives are fast paced and we enter village community with the same outlook. We enter from the fast paced urban life to slow and calm processes and procedures of village life. These processes might be hard and uncomfortable for us with a two-year-long project, but it is completely natural for people rooted in these areas who do not want to be impacted by temporal events and quick and emotional decisions.
- The presence and involvement of women in the process of analysing the issue and the decision making stage is very helpful. Due to women's presence, there is time and opportunity for analyses to take place which men usually do not have the time for.

What Challenges Did We Face?

Throughout the project we faced obstacles and challenges, some predictable and others unpredictable. We planned solutions for some of them and for others we had to decide in the moment so the project would continue and would not be stopped. Some of them made us feel hopeless and perceive them as unsolvable and facing others led to collaboration and formation of stable and imaginative solutions by the team. Some were arduous and others became the driving force behind the project.

The following is a list of main challenges we faced and the solutions we employed for each of them; solutions that might be helpful in similar situations.

Divergence in perception and approach of the different actors

Taking on the process of capacity building in the local community needs similarity in perceptions of the employer, implementing institution, project team, local people and governmental/local partners, involved in parts of the project due to their responsibilities. The divergence in perception and approach of some of the actors in this project resulted in necessary collaborations not taking shape and certain expectations arising, making it difficult for the project team. For example, what each of those involved consider as the outcome of the project - what has been predicted or what is actually achieved through the process and according to local circumstances- affects their collaboration to a large extent.

To minimise the impact of this problem we held numerous meetings and discussions with some of the project actors in order to bring their perceptions closer to each other. In addition, devising CATWOE by some of these actors helped us understand what transformation they were looking for and what similar factors they envisage in reaching the transformation.



Lack of trust towards outsiders

Pessimism and lack of trust towards the outsiders especially governmental bodies slowed the project down. The precedence of IAEO presence in the village due to the reorganisation plan, as well as the circumstances surrounding the Department of Environment fines for killing leopards had created lack of trust among the locals. This resulted in a group of the locals not being willing to talk to us at all and another group not talking to us frankly and openly about their concern.

A cause to this lack of trust had been outsider and one-sided decisions to conserve the forest, leopard, etc. Planning and deciding by the locals and publicly informing everyone about them, on the one hand, and considering the interests of both parties (the locals and leopard) throughout the process, on the other, facilitated building of trust.

Project financial matters

The costs of the project were estimated and approved according to the educational approach, but the new approach had more costs. Because it required more field work and more time for planning and reviews. It also included unprecedented tasks, which if we did not facilitate the project would have been incomplete.

To complete the project in such circumstances, the team agreed to increase the voluntary work capacities and decrease wages. This meant that lack of financial resources did not affect the quality of the project and the possibility of the execution of the project despite limitations.

Underestimation of local community's knowledge and experience by the locals themselves

The local community underestimates their own knowledge and experience in solving the issue. Each of the locals had valuable knowledge and experience about their environment due to them living in that area for a long time. This knowledge and experience was underestimated by them or there was resistance in sharing them. Some even believed that "you could comment on our problems better and suggest solutions." To counter this, we tried recognize the locals' knowledge and experience throughout the process. For example, we would record the exact wording of the analysts on the technique sheets, refer to them in the next meetings and discussions and share them with the rest of the locals. This resulted in the locals realising how individual sayings leads to formation of joint analysis in detail and depth. Consequently, they gradually discussed their ideas and experiences easier and shared them with others. Additionally, interviewing with the experienced and knowledgeable locals on the solutions to cattle loss and the publication of these interviews in the Newsletter facilitated the evermore recognition of, and even more credit given to, existing experiences and those who had them in the local community.

Based on this challenge and our experience of dealing with it, one thing that could be said as a recommendation would be that it is better to go to the local community with less predetermined plans and decisions; otherwise, the opportunity for revealing local potentials for collaboration would be lost. In addition, subscribing an outside solution to the existing problems of the local community strengthens the idea there that outsider expertise is more valid than their local knowledge, which itself is an obstacle to capacity building and empowerment of the local community.

Existing rumours about leopards

Apparently the rumour that the Department of Environment had released leopards in the area was spread by the IAEO in the villages a long time ago. The existence of such rumour meant that the locals were resistant in participating and finding a solution to this issue. The locals believed that the leopards eating their cattle are domesticated and that is the reason they cannot prey on wild animals and prey on cattle, as it is easier. They believed that this is problem caused by the Department of Environment and they should solve it themselves. They actually wanted the Department of Environment to come and collect all the leopards from the area or build a fenced area around them. We tried to discuss this issue in the public forum and examine its various aspects. To do this, we sought help from leopard ethology specialists, and also published an article in the second issue of the Dorfak Newsletter titled "Has the Department of Environment Released Leopards in this Area?" In addition, in the meeting with the Department of Environment representatives, the locals questioned them on this issue and they explained about the impossibility of this event.

Increase in number of dogs in the village

At the end of the project, due to increasing theft in the village, people had increased the number of their guard dogs. This sometimes limited the project team's access to all parts of the village. The members of the team were attacked by the local guard dogs in the last trips, which was relatively a new phenomenon in comparison to earlier trips. These events resulted in decreasing security during local surveys and limitations on movement within the village, especially access to further areas or after dark hours.

Luckily this change came at the end of the project when we were almost familiar with all the locals, different ways of circulating information among the locals had formed, and our connection was less dependent on constant house to house visits. However, previous planning with the locals to control their dogs before visiting their houses and getting help from other locals more familiar with the area were among the measures we took to minimise the impact of this issue on the process of our work.

Obstacles to gathering of the locals

The distance between the houses and the low population density in the three target villages, made gathering of the locals difficult. Also, there was no traditional public space for holding meetings.

Therefore, the analysis of technique sheets was done going house to house. Sometimes a sheet would go in fifteen family gatherings to record everyone's opinions before it would be analysed in a joint meeting. In addition, we tried to remove obstacles and to create the opportunity for the necessary circumstances of holding joint meetings. Although holding joint meetings was necessary for the project, we tried not to be hasty and let the process continue till the circumstances for it would be right. Besides we tried to identify and remove the obstacles to holding joint meetings. For example, when we realised gathering of all the women in one place is difficult for them, we decided to hold separate meetings for each village. Additionally, starting the Local Discussion Room created more opportunities for formation of small meetings for completion and analysis of the technique sheets.

The locals' cynicism towards each other

The locals had presuppositions about each other, such as nobody wants to help others here or nobody wants to share their experiences with others. This made holding joint meetings and collective work among the locals difficult. Also, the lifestyles and means of livelihood in these villages has been shaped independent of each other, thus team work is not common. What helped throughout the process of the project to minimise this cynicism was documentation and sharing of the locals' knowledge and experiences. For example, the publication of interviews in the third issue of Dorfak Newsletter, where some of the locals besides sharing their experiences showed that they are ready to help others, received positive feedbacks in the village.

Furthermore, the whole process of the project was based on analyses taking place in a meeting, and then going to other meetings to be completed. In this process, the locals realised how the accumulation of their ideas facilitates the real and in depth analysis of the issue.

6

Resources

In the two-year long process of carrying out this project and in different administrative and field works, many resources were used; resources of different types had been granted by various institutions and people to the project. Evidently, not all of these resources were related to our team or institute, rather a considerable amount of resources used came from the local people. A report of institutional/team resources and local resources in the course of the project is as follows.

Institutional/Team Resources



Human resources

1

Various specialists working either voluntarily or contracted collaborated in the formation and implementation of this project. The human resources used in this project are actually the roles each of these individuals have played in different stages of the project. Some of them collaborated with us for a short time and a specific part of the project due to their expertise or specific knowledge of wildlife or other necessary fields of the project. Another part was the project team formed due to the experience, optimism and readiness regarding the participatory methodology. The team consisted of different people in the first and second part of the project. The executive team consisted of four people in the first year and three people in the second year. Accompanying this team was a coach/consultant who helped and advised us throughout the project.

Executive Team	Role	Specialty	Relevant Work Experience
Sima Babgir	Facilitator and Project Manager	MSc Environmental Studies	Environmental training and management of training of rural societies on environmental issues projects
Sara Bagheri	Facilitator and Team Capitan	MSc Economic Development and Planning	Environmental training and facilitating collaborative processes in urban areas
Mehdi Soleymani	Facilitator	BSc Human Geography (field: rural areas)	Facilitating collaborative processes in urban areas, capacity-building in teenagers to implement changes in their living environment and publish local newsletters
Hoda Aminian	Facilitator	MSc Urban Planning	Facilitating collaborative processes in urban areas
Seyed Babak Moosavi Nejad	Coach and Consultant	MSc Development Management	Study on the subject of collaboration in provincial, rural, and agricultural areas, helping in training and implementation of collaborative approaches and methods

In addition to the team responsible for execution of this project, some of the Iranian Cheetah Society members, associates and volunteers with various experiences and specialties helped the project. Some were present during the research phase of the project, while others collaborated in planning the project on the basis of collaborative approach with changing roles.

Cheetah Society Members, Associates and Volunteers	Specialty	Field of Collaboration
Mohammad Sadeq Farhadnia	PhD Candidate in Conservation in iology	Preparing the proposal, designing the questionnaire and consulting on global conservation solutions
Fatemeh Hosseini Zavarei	MSc Biodiversity	Designing the questionnaire and participating in planning of the project with a collaborative approach
Yasaman Hassan Beigi	MSc Conservation Biology Student	Designing the questionnaire, interviewing the cattlemen and participating in planning of the project with a collaborative approach
Safura Zavarán Hosseini	BSc Environmental Studies	Designing the questionnaire, interviewing the cattlemen and participating in planning of the project with a collaborative approach
Elmira Sherbafi	MSc Biodiversity	Consulting on ecological issues and leopard ethology
Morteza Eslami	MSc Biodiversity Student	Consulting on ecological issues and leopard ethology
Mojtaba Moradi Nejad	MSc Graphic Design	Newsletter layout
Fatemeh Sharif al-Hosseini	BSc Tourism Management	Newsletter illustration



In this project different amount of time has been spent for different tasks in each stage, such as planning and designing, field work, reviewing, production and publication of the newsletter, and writing the report. The amount of time spent on each of these throughout the project has varied. The details of time spent on each stage of the project throughout these two years are as following.

Time Resources **2**

Tasks		Unit
Stage One: Foundational Studies		
Field Work	Surveying the questionnaire, discussing and interviewing the locals and negotiating with local officials	36 man-days
Administrative Work	Designing the questionnaire, documenting and analysing the information, report writing	10 man-hours
Stage Two: Choosing Collaborative Approach		
Team Training	Introduction to Collaborative Approach Methods for the team members, training and consulting meetings	448 man-hours
Field Work	Field surveys, analytical meetings with the local population, joint planning meetings, negotiation with local officials	354 man-days
Administrative Work	Planning, reviewing, documenting, report writing and translation	4306 man-hours

Financial Resources **3**

Description	Expense (£)
Stipend for staffs	7,000
Transport	2,000
Food	1,500
Accommodation	2,000
Equipment	2,500
Publishing and Distribution	1,000
Insurance	2,000
Administrative expenses	2,000
Total	20000

Besides human and time resources spent on this project, the financial resources used in the project are as following.

Local Community Resources

In addition to human, time and financial resources used by the executive team and the institute, the local community gave the project various resources, which the continuation of the project would have been impossible without. These are as follows:

- The volunteering capacity of the village population for pursuing and holding meetings, attending and participating in the meetings, operating things such as Local Discussion Room or collaborating in works such as Dorfak Newsletter
- Knowledge and experience shared with the project team and others and creating the space for collective analysis
- Trust of village population specially in initial stages, which prepared the ground for increasing interaction and facilitation of the process of the project.
- The spaces lent to us for holding the meetings and sessions, such as the mosque, a part of their shop or house and the village council.
- The tools and equipment lent to us to do the analyses, as well as facilitating transportation and accommodation of the team members.

