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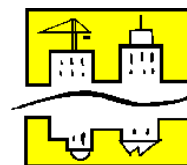
Etude préalable à la mise en place d'un programme de diffusion de l'efficacité énergétique dans l'habitat domestique en Afghanistan

Rapport final et annexes

Mai 2008

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**PRELIMINARY SURVEY FOR THE DEVELOPMENT OF PROGRAM FOR
ENERGÉTIQUE EFFICIENCY IN DOMESTIC HOUSING IN AFGHANISTAN**



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**FOR A LARGE SCALE DEVELOPMENT
OF
PASSIVE SOLAR HOUSES (PSH)
IN AFGHANISTAN**

2008 mai 05th

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ELARGIR LES PROGRAMMES D'AIDES

Cette étude préliminaire a été envisagée pour identifier et fournir les informations nécessaires à l'écriture d'un plan d'actions, pour la mise en place d'un programme de diffusion de construction de vérandas. Ces vérandas ont pour objet de permettre d'accumuler de la chaleur dans les maisons (habitat domestique), et par là, de lutter contre la vulnérabilité, de diminuer la consommation de bois, de broussailles et de bouses d'animaux, et donc de participer à la lutte contre la pollution et la désertification.

Plusieurs petits projets "pilotes" ont été réalisés en milieu rural, en partenariat avec des ONGs implantées de longue date en Afghanistan. Un projet test du même type a également été mené en milieu urbain avec une petite ONG Afghane, qui depuis a cessé d'exister. Après un temps court, une évaluation a été réalisée sur les premières PSHs (*passive solar houses* : maisons passives solaires) réalisées, en milieu rural. Celle-ci a conclu sur une évaluation positive et un projet prêt à être développer à grande échelle.

Les termes de références et la méthodologie initiale proposés rendent compte d'un développement appréhendé comme un programme de très grande envergure, avec l'objectif qu'à terme la population soit capable de construire elle-même ces vérandas. Les problèmes relevés par le GERES pour mettre en œuvre ce développement sont donc issus de ses propres champs de non compétences, avec en premier lieu la question de choix des bénéficiaires et de leur accès à un micro-crédit. Trois enquêtes ont été envisagées et réalisées comme base à cette étude préliminaire. Le GERES Kabul les a commanditées à ACF et à MADERA pour les sujets socio-économiques, respectivement des milieux urbains et ruraux. Il a traité celle concernant les institutions et pratiques de micro-crédits.

Les projets pilotes réalisés comme le développement à grande échelle de ce programme de construction de vérandas ont été envisagés à partir des méthodologies utilisées par les ONGs responsables de la mise en œuvre. Soit, une méthodologie issue de programmes d'aide ou de programmes d'urgence. Il s'agit de l'implantation d'un programme défini dans un cadre donné, pour une population ciblée.

La première considération : "un projet dessiné pour les plus pauvres et voulu à très bas coût ne saurait ensuite séduire d'autres catégories sociales s'il est identifié comme un objet destiné aux populations pauvres", introduit un premier constat :

UN DOUBLE OBJECTIF, EN RELATION AVEC LES PARTENAIRES IMPLIQUES

La multiplicité des attentes identifiables du projet, traduit la lecture de deux objectifs premiers, en relation avec les deux types de partenaires des projets pilotes des milieux ruraux :

- Le GERES : initiateur du projet et porteur de la partie technique. Il a pour objectif un développement le plus large possible des PSHs. En effet, les résultats environnementaux (baisse de la consommation de combustibles, lutte contre la pollution et la désertification) ne pourront être tangibles que par la somme des impacts

de chaque réalisation. En ce sens cet objectif, qui vise à changer les modes de chauffage, a une envergure sociétale.

- Les ONGs : chargées de la mise en œuvre dans les secteurs qu'elles ont définis. Elles ont pour objectifs d'aider les populations vulnérables à améliorer leurs conditions de vie et, avec ce projet, de mettre en œuvre des vérandas accessibles, donc les moins chères possible. En ce sens, ce projet implanté par des ONGs a une envergure sociale.

UN PROJET TRANSVERSAL ET CARACTERISE PAR LE CONSENSUS

Un deuxième constat a émergé à travers les entretiens menés avec les potentiels partenaires : ce projet est porteur de consensus. Absolument toutes les institutions et organisations encouragent le projet, mais dans le même temps, aucune ne se sent habilitée (capable ?) de porter ce projet transversal. A cela peuvent être avancées deux raisons :

D'abord, les institutions afghanes sont actuellement structurées autour de champs de compétences spécifiques, séparés ; et les objectifs affichés sont construits à partir de l'accessibilité de tous aux équipements, infrastructures et services publics.

Ensuite, ce projet a pour effet premier d'améliorer le cadre de vie individuel des habitants. Les institutions afghanes ont pour premier sujet la (les) communauté(s) et non les individus.

En milieu urbain, le ministère du logement pourrait porter ce projet, mais son positionnement incertain (il vient de quitter le ministère du développement urbain et du logement) le rend difficile d'accès. Enfin le logement social, mais surtout le retour prévu de tous les réfugiés en Iran et au Pakistan, a de fortes chances de guider ses choix vers le nombre de réalisations plus qu'à partir d'un raisonnement d'ensemble.

En milieu rural, le ministère de la reconstruction et du développement rural peut promouvoir ce projet à travers le programme du NSP (*National Solidarity Project*). Cela demande en amont une très forte information des communautés (municipales) de développement et reste le choix de celles-ci.

METTRE EN ŒUVRE UN PROJET DE DEVELOPPEMENT

Cette structuration des partenaires à travers des champs de compétences définies est également celle du fonctionnement actuel des ONGs en Afghanistan : chacune a ses propres spécificités. Cela implique de travailler avec autant de partenaires que de sujet à traiter à l'intérieur du projet. Dans le cadre de la mise en œuvre d'un projet transversal, comme celui des PSHs, cela multiplie les partenaires et va à l'encontre de son besoin premier : développer une véranda au coût le plus faible possible avec un objectif d'appropriation par la population.

En effet, d'une part, la multiplication des partenaires multiplie les coûts inhérents aux suivis et compétences mises en œuvre par chacun. Et d'autre part, plus de partenaires se chargent d'une action, plus elle est spécialisée, plus l'ensemble est difficilement compréhensible et moins l'appropriation est aisée par la population.

Cette étude propose alors de retourner le regard porté et de ne pas penser en termes d'implantation d'un projet, mais en termes de mise en place d'un processus de développement, à partir de l'appropriation de "l'objet" (la véranda) par la population.

Cet objet est destiné à des propriétaires, il est donc individuel. Il peut avoir plusieurs formes : entre le modèle simple et à bas coût, de possibles structures préfabriquées et la véranda conçue sur mesure avec des matériaux de hautes qualités, les déclinaisons peuvent être nombreuses. Il est donc possible de penser la diffusion de cet "objet"-véranda à travers un marché à créer, à faire émerger. Après avoir confirmé en secteur (péri)urbain la bonne appropriation des vérandas par les bénéficiaires, l'étude s'est donc tournée vers une première estimation d'une appropriation (de l'idée) par la population. De fait, la potentialité d'un marché de vérandas pour PSH existe et paraît être de grande échelle, du moins dans le district concerné. Et l'excellent retour fait par la totalité des acteurs (institutionnels, représentants de la population, ONGs, Nations unies, etc) laissent penser qu'il est possible de généraliser cette conclusion et que ce potentiel existe.

FORMER DES ENTREPRENEURS, CREER DES ENTREPRISES

Les besoins du projet sont alors différents. L'objet premier n'est plus de choisir les bénéficiaires, mais de former et soutenir tout le temps que dure leur installation, des entrepreneurs capables de promouvoir les vérandas (créer un marché) et de les réaliser suivant les critères d'efficacité solaire (que le GERES a mis en œuvre). Afin de favoriser l'émergence d'un nouveau produit socialement souhaitable, il est courant de le subventionner. Cela est certainement également à envisager, pour toute la période de communication de ce "nouveau produit" que devient la véranda.

L'entrepreneur doit donc être capable :

- de communiquer, en amont pour faire émerger ce marché
- de communiquer ensuite, pour se créer un réseau de clientèle
- de réaliser les vérandas : lui même ou une équipe sous sa responsabilité
- de gérer son entreprise pour qu'elle soit viable dès que la demande est suffisante

Le GERES a alors à charge :

- de mettre en place les formations nécessaires
- de suivre et soutenir les jeunes entrepreneurs (sans les intégrer en son sein), y compris par des contrats de prospection ou de construction de vérandas comme il peut avoir avec des artisans charpentiers
- de vérifier la qualité des constructions (possible mise en place d'un label)
- éventuellement de subventionner les constructions, que cela soit dans la première phase d'émergence, ou à but social pour aider les familles les plus vulnérables.

PENSER AUX EVOLUTIONS ENVISAGEABLES POUR LES RENDRE POSSIBLES

La première remarque : "un projet dessiné pour les plus vulnérables et voulu à très bas coût ne saurait ensuite séduire les autres catégories sociales, s'il est identifié comme un objet destiné aux populations pauvres", traduit l'importance d'anticiper sur les évolutions possibles, pour les rendre envisageables.

Ce développement du projet permettrait alors au GERES d'envisager son évolution, par exemple à travers d'autres populations cibles :

- Travail sur l'esthétique de la véranda pour une meilleure acceptabilité

- Travail sur les types (la qualité des) de matériaux présents sur le marché afghan
- Travail sur d'autres types de structures (le métal ?) possibles
- Travail sur l'intégration dans les futurs bâtiments neufs de l'utilisation du solaire passif
- etc.

LA COMPLEMENTARITE POUR LA CREATION D'UN RESEAU

Appréhender la diffusion des vérandas à travers la construction d'un marché et l'installation d'entrepreneurs n'exclut pas de répondre individuellement aux sollicitations des ONGs qui souhaitent inclure dans leur programme la construction de vérandas. De plus, dans les secteurs reculés et peu denses, le marché potentiel des vérandas est beaucoup trop faible et la meilleure intervention possible est certainement la mise en oeuvre de programmes de construction de vérandas, par des partenaires.

Les constructions seront réalisées par des artisans locaux formés sur les techniques à mettre en oeuvre. Le GERES peut se saisir de l'opportunité pour mettre en place dans chacun des secteurs concerné, un "mini-centre" d'informations sur les PSH complètes (véranda, isolation, etc.). Cela peut être à la charge d'un artisan particulièrement motivé et situé dans le centre urbain du secteur (par exemple à proximité du bazar), moyennant des formations organisées par le GERES. La déclinaison de ce modèle peut mener à terme à l'établissement d'un réseau de "représentants" liés au GERES, pour promouvoir et implanter les différents "produits" qu'il développe. Cet objectif devient du très long terme, mais s'il est reconnu, permet d'envisager différemment les divers programmes mis en oeuvre par le GERES.

Une difficulté qu'il ne faudra pas sous-estimer sera de gérer, dans les lieux où elle émergera, la proximité d'implantation de programme d'aide et la création d'un processus à partir de l'émergence d'un marché.

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This passive solar houses project is a technical project carries out by an (humanitarian) association, in the Afghan context. It derives from two on-going passive solar infrastructures projects :

- a pilot project, no yet well-assessed : greenhouses in Afghanistan (first implemented in Laddakh) ;
- an on-going large scale implemented project : passive solar houses in Laddakh.

After different context (technical, institutional and aimed) analysis, this document presents two ways of developing the PSH project on large scale. This survey was led by Anne Burlat, consultant, for Villes en Transition awarded for its methodology proposal. it was carried out between August 2007 and April 2008. The terms of reference are annexed (annexe▼).

Initially, the answer of ToR was focused on how all the involved partners can co-operate to be efficient for the PSH project development, including how to select the beneficiaries. Soon afterwards, the focus was on the sustainability of the development project, it can not be only promoting program implementation. Indeed, the scope of this survey is to offer two possible complementary ways to develop the PSH project, regarding the two identified aims.

This survey was carried out in a strong security context, following an expatriate NGO kidnapping 10 days before the first working mission. As planned in the ToR, the two working missions were led only inside Kabul area and did not include a short travel in Beshud, as suggested by MADERA and accepted by the consultant during the first working mission. The survey schedule and the winter conditions linked with the security context did not allow this trip.

This report includes an annexes volume.

OUTLINE

As indicated in the methodology notes (cf. annexes), this survey has to be led along 4 stages :

- finalisation of survey frame, in Afghanistan, with local partners ;
- leading detailed survey on 2 defined areas, rural and urban (realized by partner NGOs);
- leading survey of financial system (realized by partner NGO or GERES) ;
- strategic reasoning and programming.

The second and the third stages had to be done by the GERES, and its partners localised in Afghanistan, the first and the fourth stages each included a 6 day working mission in Kabul.

The proposed methodology was drawn to implement the PSH project with partners this survey had to identify. The first working mission highlighted specific characteristics of the PSH project, the involved target, the aid-approach specificities and implication from the potential partners (institutional and humanitarian). The strategic reasoning was then led from these topics, including the possible/necessary relations between partners.

Documentation was provided by GERES (Aubagne and Kabul), was collected on institutional websites (MISFA, AKDN, AREU) and in AREU library. A list of documentation consulted is annexed to this report.

Interviews were carried out with the following categories of respondents :

- Households who have a PSH, beneficiaries or self-replicants ;
- GERES staff in Afghanistan, local and expatriate, and PSH program leader for Laddakh ;
- NGOs GERES partners : MADERA, Solidarité, ACF, HRA ;
- Institutional services for environment and rural development : NEPA, UNEP, MRRD ;
- International cooperations : AfgEI, GTZ, USAID ;
- UNDP, UN-Habitat, UN-HCR ;
- Microfinance institution : FMFB ;
- AKDN ;
- Kabul Municipality ;
- Districts 6 and 13 *Wakil* .

And in France :

- NGOs present in Afghanistan : URD, Planet Finance ;
- Institution worked in Afghanistan : Horus group ;
- Competition winner for planning new Kabul : Architecture studio.

DIFFICULTIES ENCOUNTERED

One limitation has been the planned survey duration, mainly the stage two, regarding the availability (including the expatriate staff turn-over) of the different potential PSH project partners and winter season. But, rather than preventing this preliminary survey, this fact supports the other conclusions of this survey.

Because **the GERES has not developed the PSH project itself so far**, there is (and was) no PSH project leader in GERES. Consequently, all the studies done were made by various

members, at various moments. And now there are no project lines incorporating all these documents in a logframe : currently, there is a sum of information, without specificities about their updating and the progress reasoning. Indeed, the main limitation we had was not so much the difficulty to access the documentation as knowing how to interpret it. In the annexe (cf annexes) we will list the tasks GERES can do to build the PSH project, especially the technical part.

Potential beneficiary motivation to participate in the PSH project was an important target of the survey to lead. This discussion involves wide information to the inhabitants about the PSH outcomes. Because the urban areas were not definitively defined yet, because the surveyors do not have habits and abilities in asking about this purpose, because this would involve time to implement it, the survey done could not access this information.

The VeT proposed methodology clearly aims **at include the local population representatives**, as soon as possible inside the process development.

STUDY ORIENTATION

The last survey stage (the fourth) was built from

- Two identified target integrations ;
- The GERES skills and acknowledgment of the lack of skills
- The potential partner aims ;
- The conditions for a sustainable project development and the differences with an emergency project or an aid implemented project.

This passive solar project is a technical project carried out by a (humanitarian) association, in the Afghan context. As we will see, the achieved object is simple but the organisational project is complex.

The pilot project and the following realisations, have been undertaken case by case with various attempts in relation to each context. The Afghan PSH (Passive Solar Houses) project was initiated from the Laddakh PSH project, but it was improved with each built realisation (in Afghanistan, indeed the context is quite different). Obviously, this practice cannot be followed for the next project stage. The success of PSH development project depends on various keys.

PROJECT SUCCESS KEYS

We are actually able to identify :

[depending on \Rightarrow]

For the veranda :

- Longevity : technical maintenance, namely wood care, airing and plastic film replacement, possibly, wire replacement ⇒ Inhabitants
- Quality : depending on the compliance with the proposed models, mainly the structure quality, namely the articulation solidity and the kind of contacts built up with the existing house and ground.

⇒ "Carpenter" (Man in charge of labour) & Definition of good model

For the passive solar use

- Efficiency : respect of the orientation, and size (including window size) constraints
- Effectiveness : respect of the required materials

⇒ Supervisor & Good definition of model

For the project appropriation

- Efficiency : balance (personal appreciation) between cost, effectiveness (including welfare and fuel saving) and aesthetics ⇒ Inhabitants
- Promotion : communication done for the PSH including access to the PSH knowledge ⇒ GERES & Organisation in charge of carrying the project out
- Auto-replication : good understanding of the proposed models

For the project management

- Budget access : including loan or micro-credit possibility ⇒ Project implementation
and minimizing the veranda cost for social aim ⇒ Model definition
- Real cost : minimizing the human supervision or advice ⇒ Project implementation

Many of them are dependant on the aim as defined by the project, some are even related to subjective judgement or possibly personnal interpretation. Obviously, the more the technical project (as represented by models) will be defined, the easier it will be to follow it well.

The project development includes two part.

- The construction, the veranda, as a use of passive solar. This part includes the model and a part of communication.

- The project implementation by the various partners

First, we are going to see the various points of the veranda construction. And in the next chapter, we will approach the possible implementation by the partners.

AN ADDED VERANDA

The passive solar is used in a sunny and cold country. Winter in Afghanistan is a typical appropriate climate. The PSH project is based on an added veranda, on the main south-oriented house facade. This veranda can accumulate warmth if the roof is built perpendicularly to the sun rays, and with see-through materials. This simple model brings important changes in fuel consumption at the household level. It decreases fuel consumption by at least 50% (GERES survey). On a first limited rural sample, a GERES survey found that 42% of the houses meet the technical criteria (south-oriented). The urban survey led in the kabul district 7, 13 and 6 (November 2007) shows that "50,5% of the houses are eligible to PSH, and 10,5% of the houses show a good potential for PSH, even though not ideal".

But in the hot season, this roof has to be protected against the sun rays, or taken down. This constraint requires to use of a light roof, when the structure can stay on site. This assembling and dismantling, requires the necessary skill to lay the roof material each year, and take care of it if it has to be reused. The structure will be subjected to rain and sun in the summer time, and freezing on winter nights. The veranda materials are subject to hard conditions.

VERAND MATERIALS

Availability in Afghanistan can be a problem for materials, and show a big difference between Kabul and rural areas. The materials available in Afghanistan are mainly imported and often of lesser quality. In the pilot project, the roof is done with a plastic film (imported from Iran for good quality), the structure in white wood (mainly imported from Russia), and wires are used to support the film.

Two qualities of plastic film are available in Afghanistan. The best one cost twice as much as the lowest one but can be used for two winters whereas the low one, very thin and easily damaged, lasts one year or less. The best quality is currently not available in the Beshud region. Both are altered with sun rays, they become brittle (less soft) and white (lose their transparency). The visits done during the 2007-08 winter reported it seems the inhabitants chose a low or medium-low quality to replace the plastic film, when after two winters they had to buy a new one.

If we consider that a key of PSH success is linked with the efficiency and attached to the use of the plastic film, we need to know if the lower plastic decreases the performance of the infrastructure in a way that will undermine peoples interest and confidence. Some PSH would be evaluated after a few more years.

In urban (periurban) area, the available wood is imported. It is a white and light wood. In comparison with regular (traditional) construction wood, this cheaper quality requires good maintenance. In rural area, the traditional construction wood is the poplar tree. Its quality is better, softer and stronger, but it depends on the inhabitant plantation.

In August, we visited two families. When questioned by GERES one of them indicated that when veranda exists, there is humidity on the steel windows (cold material), although they air the veranda. GERES explains it is very common and normal with steel windows. It depends on the use made of the veranda room during the winterdays too.

If we consider the available wood, the longevity of the structure is linked with the quality of maintenance.

VERANDA STRUCTURE

The weak points of the structure solidity are the articulations. There are three. One on the top where the veranda joins the house, one at the bottom, where the veranda meets the ground, and one in the middle, where the roof starts. The visited PSHs show, that after the quality of materials used, the quality of the veranda is directly linked with the quality of these articulations.

The visited PSHs have different sections, relating the year construction. The given reason by the GERES supervisor is the articulation quality. We can notice bigger section for the more recent veranda. Even, the use of there sections are not optimal. In the same way, pointing are often different and not always the most effective.

For a large-scale development, the project as to be well defined, with easy understandable drawings. The easier the understanding of the project is, the more people can follow it, the more difficult it will be to alter it. Indeed, the first risk of building some wrong project is to interprete what will be built, and the second is a bad maintenance.

The efficiency of the veranda is linked with respecting the orientations. And if we consider the defined project wood section, the quality of the structure is linked with the quality of the articulations.

VERANDA HOST ENVIRONMENT

Often, an outdoor floor has to be done first, and an interpretation from the model has to be done too, depending on the dimensions and the materials of the existing house. Still, depending the existing windows, they will have to be enlarged (generally not in urban area).

In the same way, the model project has to be well defined and shows where the veranda dimensions can change. In the case of low-cost verandas it is even more important. GERES reported often the supervisor would to be kind to the (vulnerable) family and builds a veranda as big as possible according the existing house. But in the long term, it is not always a gift, when the inhabitants have to change the plastic film and buy a new one.

In the case of coumpounds the project has to view the main different possibilities to suggest an organisation, respectful of each household. Currently the PSHs built within this context are done inside one property : the owner livee in a house and lets the second one.

Eventually, the November 2007 Beshud survey draft notes "An average of 71% of houses in Behsud 2 have one level, they are 54% in Behsud 1". Between 29% to 46% have one floor. It seems to have a terrace front of the main south-oriented facade. Proposing a model for the Beshud areas involves more indications about the possibilities to build a veranda in front of a first floor room (wood structure foundations).

A LOW COST VERANDA

Regarding the first aim, the PSH project has to offer as cheap a veranda as possible. For the pilote project, the inhabitants labor was used (required). When discussing urban areas, it seems the result is more real for appropriation meaning than for cost meaning.

- A cement floor is demanded, but in fact, often the quality is not good enough and the engineer from GERES prefers to build the last 5 or 10 centimeters. It can be owner promessed to built it and two years later did not yet. Regarding the major use done inside the veranda (bathroom), it could be important including its realisation with the PSH project.
- For the capenter help, this labour is only used to carry items. In fact this labour is not expensive and the cost (4 usd/day x 4 days = 16 usd) represents 5% of the budget (GERES survey, september 06).
- When discussing with inhabitants about the duration of the plastic film, it can be very different. Only one visited PSH re-used the (high quality) plastic film given with the veranda 3 winters and hopes passing a fourth one. Generally, the family used the (high quality) plastic film given with the veranda 2 years, sometimes, only 1 year. It seems after, when they have to pay the material, the inhabitants pay better attention to the plastic film.

For the achieved pilot project, the door (in wood) is 14% of the total cost (including the pavement), nearly the same as the skilled labour (15%). They are the second items, after wood beams (25%) and just before plastic film (12%).

The doors in the visited verandas are not of a really good quality, and the engineers specified they are really better (and cheaper) than in Beshud. It can be some of them do not close (the maintenance was not done).

COMMUNICATION FOR AN UNDERSTOOD PROJECT

We can understand from these remarks that the success relies on the understanding of the skilled workman, but on the inhabitants as well. Specific attention has to be paid to the communication. Not only the project concept (passive solar) communication, but also (mostly ?) the technical communication.

And, if we consider the two aims defined at the beginning, the latter is a key to the project evolution.

Drawn technical explanations do not exist. If we compare photos of PSHs (GERES or MADERA publications, surveys), their structures are quite different. In august, when the UN Habitat representative criticized the veranda aesthetics, we showed him a very small photo from a rural area, etc. About communication, the GERES has to develop contents in relation with the partner and with the target. It seems in the current communication, the achieved object is not very important if the concept has been followed.

In fact, from what is possible to see saw and discuss in Kabul, a lot of work was done on the technical object. Some attempts were made, but only the GERES engineers are able to say so. And it seems that often they interpretate according to each case. This way cannot be followed on a large scale project without waste. Because of the Afghan context, the GERES western staff stays in Kabul for a short time. Currently, the GERES has a sum of various surveys, but

no capitalised knowledge. When necessary, they do a new survey, but there is no built plan to follow the project. For example, during the 2006 summer, two important surveys were done (evaluation and potential economic viability). Nearly two years later GERES has (or can have access to) important new informations to update this surveys. In april 2008 we know only for Kabul if the beneficiaries who have owned a PSH longer than two winters have replaced their plastic film (if not, why) and for some of them which quality. In rural area, we do not know, even if they noted a difference in the case of low quality use, which would be likely and how they manage to find the budget, etc.

As a result, communication really is a big part of the project, and not only from the concept point of view (passive solar explanations). We can understand from these various situations the completed project is simple, but the organisational project is complex. And, this fact needs to be accepted, along with its impacts. To be successful, the project needs to define specifically the responsibility of each partner, as we shall see further.

THE BUILT PSHs

THE POSITIVE ASSESSMENT DONE

The most important point is the appropriation by the Afghan inhabitants. There are self-replications in rural areas, we saw some in Kabul. GERES knows the Afghan used to put a plastic film in front of the windows during winter time. And we saw a less efficient veranda, built like a tent in front of the house. When asked, the inhabitants answered the idea had come from Iran where they were refugees.

The households accept without difficulty the idea of a veranda, but do not related to the possible efficiency nor to how to get there.

GERES TECHNICAL CHOICES

Because the first implementation was undertaken in rural areas, the wood was chosen for its structure and carpenters were picked to built it Because it is difficult to get the appropriate wood and because of the vulnerability of population, GERES has changed the model and some technical details they had implemented in Laddakh. All these choices have to be effectively decided upon and capitalized.

Regarding the construction supply market, the veranda models will progress. This gives the possibility for various evolutions. let us not forget these possibilities when developping a low-cost veranda.

BENEFICIARY REPORTS

All the beneficiaries we met had put a new the plastic film for the winter when the old one was too damaged and could not be re-used. They did it themselves, even the veranda model is quite complicated. All the household members participated, event the children, to put up and stretch out the plastic film. It seems no neighbour or other family member participate.

They re-positioned wires when necessary : all visible things problems were fixed. But, only some of them adjusted the door and said to have done maintenance : it does not seem necessary enough to be done. One (nice) veranda was dismantled. It was imposible to know why : the family said they were satisfied. They upgraded the house and they are less

vulnerable than they were at the construction. Only in the next winter will GERES have information as to whether they rebuilt a new one or not.

The main and common (shared) satisfaction mentioned by beneficiaries is the possibility to have a warm bathroom, a warm place to wash cloth or cook and free warm water : each morning the women fill several plastic cans (~10 l.) and at noon the water is warm.

None of the beneficiaries met gave negative feedback about the veranda itself or the construction.

THE AFGHAN CONSTRUCTION CONTEXT & DEFINED VERANDA MODELS - Conclusion

- A weak construction supply network

GERES continues to look for appropriate materials, even in neighbouring Pakistan or Iran, to improve the possibilities. This constraint is high in remote places.

- Effective veranda cost

For sustainable development, the participation of the households is very important, but has to be effective.

- Non-defined precise models as yet

A low-cost project involves the implementation of a veranda with as little labour as possible

- Non-completely defined technical choices yet

A low cost veranda involves using as few materials as possible

- A technical idea easily understandable and acceptable by inhabitants

Developing a large-scale project now involves stopping the constant improvement of verandas with each new construction. Now some decisions have to be made, even GERES continues its research to offer future evolutions.

In addition to the built veranda itself, we are going to approach both the current and possible project implementations and to consider the potential partners of the PSH project. A multi-partner project involves several aims to the project. Although these aims are not in contradiction, they have strong impacts for the implementation choices to make.

A TWO-AIM PROJECT

Regarding the project partners and what has already been achieved, the planned project shows two faces, one with a social approach (households beneficiaries), and one with technical considerations and its impacts on the Afghan society. The initial PSH project has two aims :

- To help the most vulnerable inhabitants – Social project, for vulnerable households
- To improve the use of renewable energy – Sustainable development project with "society impacts" and linked with technical approach

A SOCIAL PROJET - linked with the most vulnerable population
in rural and urban (suburban) areas

In this aim, the PSH project target poor families, often already having debts. Their main reason to join the project would be to save money during the heating season / to upgrade the temperature inside the house during the winter, with a little fuel consumption.

"For the beneficiaries, the first advantage associated with PSH is warmth, the second is fuel saving, the third is production of vegetables in winter and the fourth is the extra room provides. The fuel consumption is not the first benefit. There is a difference of perception between GERES and the beneficiaries." notes the evaluation for rural area.

Indeed, there are differences between rural and urban inhabitant needs and uses. Therefore, for this aim, the project has to be as cheap as possible. In other cases, the family cannot afford it or this choice will put in danger the household stability, already week.

A TECHNICAL PROJECT - Developping a sustainable society
Establishing and keeping up the use of passive solar energy

In this aim, the PSH project targets a technical product in relation with sustainable development. There, the reasons to join the PSH project are completely individual and depend on the qualities of this technical product, including saving during winter.

In these way, rural and urban areas will express various problems. In rural area, the villages are quite homogeneous in type of habitat and we can suppose in terms of education. In urban areas the differences between the most vulnerable, and the middle class (the upper class) have produced various kind of housing and behaviour. So, if the PSH project is identified (only) as a solution for poor families, the major part of the population would not join it. We can report a reaction of an UN habitat officer, when GERES explained the PSH project "but it is ugly". With this exclamation, he shows that the aesthetic point of vue does not have to be underestimate. This remark is very close to the two aims considerations.

STAKES & IMPACTS**INDIVIDUAL level****SOCIETY level**

AIMS (EXPECTED RESULTS)	Environment		<ul style="list-style-type: none"> • Fuel consumption decreases • Pollution decreases from heating systems • Pressure decreases on natural fuel collecting : bush, wood and dung
	Risk	By reducing fuel collecting in remote areas : <ul style="list-style-type: none"> • decreasing the antipersonal mines risk • decreasing the safety risk for young women 	
	Social	<ul style="list-style-type: none"> • improvement of quality of life (vulnerable population) • a day time extra warm room (for economic or social activities) • Hygiene, warm room and water 	<ul style="list-style-type: none"> • helps (re)integration process within the Afghan society
	Health	<ul style="list-style-type: none"> • Hygiene, warm room and water • Smoke decreases in the house 	
	Economic	<ul style="list-style-type: none"> • Possible time profit in collecting fuel • Possible money profit in buying fuel • unlimited access to warmth 	<ul style="list-style-type: none"> • If fuel shortage : demand pressure decrease
NEEDS	Financial	<ul style="list-style-type: none"> • Budget access (micro-crédit, ...) • Individual investment (time and/or money and/or materials) • partner participations (grants) 	<ul style="list-style-type: none"> • Involvement of housing loans
	Communication	<ul style="list-style-type: none"> • Promotion of passive solar houses (PSH) 	
	Institutional		<ul style="list-style-type: none"> • Promotion of passive solar energy
	Technical	<ul style="list-style-type: none"> • skilled workman training : technical transfer • Appropriation of this know-how → continuity in time (taking technicity over by skilled workmen) 	
	Materials	<ul style="list-style-type: none"> • Compatibility Cost-durability-maintenance → be responsible (Carrying a right maintenance out by beneficiaries) 	<ul style="list-style-type: none"> • Building supply network
	Land	<ul style="list-style-type: none"> • Owning land for house extensions 	<ul style="list-style-type: none"> • In keeping with the law
EFFECTS	Social	<ul style="list-style-type: none"> • Beneficiary choice : takes vulnerability level into account 	
	Built	<ul style="list-style-type: none"> • South-oriented houses promotion urban design 	<ul style="list-style-type: none"> • Evolution management : urban blocks and villages
	Environment	<ul style="list-style-type: none"> • Impacts of cumulative individual actions and immediate consequences 	<ul style="list-style-type: none"> • Taking into account the environment and possible benefits for Afghan society

A CROSS-CUTTING PROJECT in The Afghan (institutional) specific context

A consensual project

One of the most specific characteristics of this **project is to bring consensus** : it is efficient, it promotes sustainable development, and it is in conformity with the Afghan government and donors' policies. There has been no negative feedback about the project thus far.

The PSH project affects many fields of development : environment, energy, housing (living), social, urban and rural development, construction, sanitation, etc.

During the first mission in Kabul in August 2007, all the potential institutional partners we met considered the PSH project as good and useful. They agreed to promote it but, on first contact, none of them wish (or is able to) carry it out, nor to manage it. Two reasons can be given.

Conversely, in the Afghan context, no institution is able to take on this project just on the basis of its own competence field. Indeed the Afghan government targets :

- a specific competence field(s) for each ministry
- basic service access for all, but through each separate field

No institution is currently able to carry it out alone, nor **to lead it**.

This way, the passive solar concept can be considered as a society project. But, the PSH project cannot tackle alone such an ambitious scale. Which brings us back to the two aims previously mentioned.

INDIVIDUAL BENEFITS (Individual welfare project) **WITH COMMUNITY IMPACTS**

On the other end of the scale, namely the concrete part, the PSH project is considered by the institutions as an improvement and as an individual project. In Afghanistan where the government's established priority is to provide energy, water supply, drainage system, sanitation, education, etc. and access for all, the PSH project is not a priority for the institutions. Even for the inhabitants, as shown in the evaluation.

"The project does respond to beneficiaries' needs, but not to their most pressing needs."

The discussion I had with *wakil* shows the same meaning. They seemed to agree with the PSH project implementation and further, expressed their basic services delivery as the most pressing community needs.

Wakil is the population representative of the *Gosar* (underdistrict administrative level)

This project is considered as an individual upgraded project

Actually, the previous diagram shows that **the main** stakes and **project interests are individual**. The PSH project targets the owner.

As everyone knows, when shared and developed on a wide scale, an individual action can have an important impact on the community, mainly in the future. Therefore, the PSH project always includes a sustainable development target. As many PSHs as possible have to be built, because its overall effectiveness stems from their cumulative total impacts.

Therefore, the PSH project is clearly a development project, even from the social angle. From this individual point of view, it is very important to define the target focus (social or environmental) of this project, to recognize it (and its consequences) and to communicate it.

IMPLEMENTING A SOCIAL PROGRAM

A social program targets defined population, with a specific aid program. For these reasons, they are rather a program implementation than a development project that could be appropriated by a wide range of population itself. Vulnerability, debts and then micro-credits are the main three keys for a social (development) program implementation. As we will see further, GERES has no competence to manage any of them. In case of social program implementation, it has to be led by a partner, such as (social or micro-credit) NGO.

VULNERABILITY

(cf. - *Kabul vulnerability study*, ACF, December 2006)

ACF take up the definition "Vulnerability can be defined as "the exposure to contingencies and stress, and difficulties to coping with them. Vulnerability has thus sides : an external side of risks, shocks and stress to which an individual or a household is subject ; and an internal side which is defencelessness, meaning a lack of means to cope without damaging loss" (Chambers R., *vulnerability, coping and policy*, IDS bulletin 1989)

This definition of vulnerability includes economic reason (poverty), but is based on psychological effect. It enlightens the first benefit of the PSH for beneficiaries : warmth. The initial purpose of PSH project was to provide a room for winterwork, in an economic meaning, to increase income. As we saw the main use is sanitation and social, the veranda is often used like a bathroom (children needs), kitchen, place to warm water (each morning, put in big plastic can down), and as a life room for wintertime.

The done short survey assessment shows it seems the beneficiaries choice having more warmth than saving fuel. Is it possible to accept this fact, and understand its meaning, for the potential PSH project partners ?

In a funding project the first question concerns the approach of beneficiaries.

The first type of vulnerability is related to geographical situation and remote places (from the center in urban areas, from the main road network in rural areas) where land is not well covered by basic services delivery.

The main point of vulnerability "linked to family's characteristics ... and their difficulty to have access to cash" (ACF). In rural and urban areas, the situation, even the criteria, can be different. In rural areas, the most important criteria concerns the possession of cultivable land, irrigated or not, and their size (*jerib*). In urban areas, the education level makes a difference. In both cases, the main criterium is the number of men of working age, related to the number of household members.

ACF notes (for Kabul) "the most vulnerable are female head and families with unskilled breadwinners is often named". The survey done in November 2007 underlines that "With few exceptions, the head of family is always a man". The returnees are often quote. In fact, their situation is not homogeneous, it depends mainly when they came back and which ethnic group they refer to. It is interesting to notice the absence of ethnic criteria inside the different studies. It is tricky to tackle this subject, but inside conversation, often the specific Hazara position is noted. I met a person in charge of *gozar* who, to my question "who are the most vulnerables ?" answered "returnees and Hazaras". Beshud is in Hazarajat. When we do not notice the ethnic group membership, the risk is other people's comments later, when they notice only (mainly) one group was helped.

Remark :

The meeting organised in Kabul in April 08 to discuss with *Wakil* of district 13 gathered 8 of them : all are Hazaras. When asked, the GERES staff answered that a very wide majority of district 13 population is Hazara. If the western organisations do not want to mention the ethnic membership (no question inside the november 07 socio-economic surveys), the Afghans know for themselves and often act according. It could be important does not to ignore it.

The major issue concerning the beneficiaries' approval, is their capacity to maintain the structure, to take charge of the assembling and dismantling of the roof, and to be in a capacity to anticipate the plastic film replacement. These constraints can eliminate the possibility for the women head of family. Yet, it is not possible to target them.

DEBTS

[cf. - Klijn F., Pain A., *Finding the money : Informal credit practices in rural Afghanistan*, AREU, June 2007]

All the documents mention the high level of indebted household in Afghanistan. The survey done in November 2007 note 77,5% of households have debts, 13,5% have a micro-credit.

ACF specifies "In ACF's study of 2003, families had in average an annual income a little bit higher than their annual debt wich was of 38.000 Afs (760 Usd). Even if the sample and visited areas were not the same in the two studies, it is still striking to see that the annual debt level of the population interviewed in 2006 is twice the debt level of the population interviewed in 2003". "The average debt level is 70.000 Afs/family (1.400 Usd) when a family earns 44.664 Afs a year (893 Usd)."

The December 2007 survey notes an average income per month for the sample at 6332 Afs (75.984 per year). The lowest 25% earn 3000 Afs /month (36.000 /year).

The AREU survey of informal credit practice was made (in rural areas) in three contrasting villages (Herat Province). It suggests a number of key conclusions (I underline).

"First, informal credit practices are widespread with most households both giving and taking credit, having multiple understanding debts simultaneously and a variety of different households with whom they exchange credit. Second, there is great diversity in informal credit practices, the meaning of which have to be understood according a social

contexte. A large proportion of these credit transactions are on a no-interest basis. Third, informal credit is almost exclusively used for either consumption smoothing or marriage with very little being deployed for investment in enterprises. Fourth, the reasons for entering into informal credit relations are diverse but include investment security, for providing assistance as well as maintaining or consolidating patron client relations. Fifth, the majority of households are able to access credit and have confidence that they will be able to do so. Sixth, repayment practices are usually highly flexible and negotiable. Seventh, for many of the households informal credit has positive outcomes in achieving immediate welfare goals. This however is not universal and the dynamics of informal credit are changing over time."

We have short information about urban matters. If 77,5% of households have debts and only 13,5% of them have a micro-credit, we do not know what is the practice for the majority. The november 2007 survey shows in Beshud area, 80% of households have debts. Indeed, in urban area like in rural area, it seems the debts practice is become a commun way of life.

HOUSING MICROCREDIT & LOANS

(cf. - *Afghanistan housing sector assessment*, ShoreBank International, March 2007

Microfinance market survey in Eastern provinces of Afghanistan, planet finance, August 2007)

All the stakeholders in the finance or microfinance field agree on the lack of specific housing product. Currently, numerous surveys are going to be done to offer something new. The specificity of the housing-related credits is the type of requires guarantee, the property is used for it. But this tool is a legal one and involves a good level of legality. the specific Kabul situation where assessment is nearly 80% of illegal construction does not allow to develop it without specific evolutions.

The FMFB (First Micro finance Bank) is doing a survey to offer a housing loan, but the first stage ought be meant for district 1 or 7 (GERES interview February 2008), where a pilot project for house legalisation is going on, or for civil servants and employees (meeting with FMFB representative). In this second case, the financial product targets housing, but does not use its specific characteristic. In fact, the FMFB studies the way to propose housing microcredit because they realized a wide part of the allocated economic microcredit is used for housing purpose.

In March 2007, The ShoreBank report noted :

"The only microfinance institution that providing formal housing microfinance products in Parwaz, with 100 loans outstanding. Loans amounts are from 5.000 to 50.000 Afs (100 – 5000 Usd) over a six month term. Interest rates are 2% per month. The loan product is similar to Parwaz's existing individual business product, except the proceeds can be used for home improvement, including repairs and basic infrastructure. Loans are made on an individual basis, typically guaranteed by a co-signer. No mortgage or similar guarantee is required. Parwaz launched the product because they saw business client were using loans to improve their homes. As the product is only three months old, they have only 100 clients out of their total of 4.100 clients."

MISFA (Microfinance Investment Support Facility for Afghanistan) internet site registered 15 microfinance partners (in annexe below), including 5 which only targeted income activities, 6 which are (mostly) women-oriented, 7 operating in Kabul, 5 only in rural areas and none yet in Beshud. In fact, the sector is specialised, and the PSH project development will require special projects.

When GERES met microfinance organisations (9 of them) in February 2008, a majority of them were told they would be ready to set up a partnership with GERES on PSH, with a specific product (or not) or in the frame of their house improvement loan (FMFB : In March, it will launch a new pilot product specifically for housing improvement).

Sundunq (MADERA)- Potential for the project : Behsud (to be open Spring 2008)

ARMP (Aga Khan Foundation : AKF) - operating in Bamyan (all districts, incl. Yakawalang), Badakhshan + 7 other provinces)

FMFB (Aga Khan Foundation : AKF) - Potential for the project : Kabul - district 13 & 7 (agency already existing)

BRAC - operating in 22 provinces, including Bamyan (Yakawalang) and Kabul

CFA (CCF) – operating in Baghlan, Kunduz, Badakhshan, Takhar.

One of them AFS (Mercycorps) Just hired a consultant to design a product for housing loans but, the micro-credits are Mostly women-oriented (80% of the clients).

Afs (Mercycorps) - Kabul & Jalalabad. In rural & suburban areas (districts 7 & 13 of Kabul represent 20% of their portfolio).

FINCA (FINCA international) has already made a partnership about energy efficiency project in Indonesia and are interested in Afghanistan.

Even, The MISFA site presented them : "The organization has pioneered the development of sharia compliant lending (murabaha) in Afghanistan. As of September 2006 all FINCA Afghanistan credit products are Islamic compliant and will be expanded to address specific needs of women entrepreneurs and also increased loan sizes needed by slightly larger micro-enterprises. FINCA operates in city and surrounding areas of Kabul, Jalalabad, Herat and Mazar-e-Sharif.

PARWAZ does not answer to the GERES request

Although, The MISFA site presents them as follows : "PARWAZ, is the first woman-led Microfinance institution for Afghans by Afghans in Afghanistan. PARWAZ is a grass-roots, local microfinance organization offering credit to male and female households in Kabul and Ghazni city and surrounding areas."

We can note that in spite of invitations and e-mails before, no microfinance institution was present during the workshop day (April 9th 2008). Only the F.M.F.B. came but did not talk.

The November 2007 Kabul survey notes

"The debt (from 3.000 Afs to 800.000 Afs) is an average 88.580 Afs (1770 Usd).

The main reasons are :

- Daily consumption (food, rent, fuel, repaying debts...): 45%
- House improvement / house or land purchase / construction: 24%
- Family events (bride price, wedding, funerals): 16%
- Health care: 13%
- Business investments: 7,5%

The total is more than 100%; as several peoples have contracted debts for more than one reason."

THE AID APPROACH (NGOs) CONTEXT

In the current way the project is developed, we can identify a technical organisation (GERES) for the project definition, and social organisations (MADERA, ACF, Afghan NGOs) to implement the project on site. The third stage of this study (socio-economic survey) shows how each organisation works with its own abilities, although the PSH project is a cross-cutting project. The evaluation has noted too :

"GERES is more interested in technical issues than in capacity building. GERES is more interested in finding partners that can help him reach objectives than by institutional development of these partners. Risk for the quality of the capacity building process".

Obviously, in this aid approach context **each organisation has its own specific skills.**

This reality entails :

- ➔ Implementing a social project (rural area or defined urban population) involves a partner
- ➔ Creating the possibility for families to have access to sufficient building funds involves one more partner :

GERES / carries out the technical project - building the veranda

NGOs / carry out the programme - take charge of the social part

+

Micro-finance institutions / carry out budget access

The given PSH cost in the survey is the realisation cost (materials and labour). It does not include the important cost of project follow-up. The beneficiaries had to provide 30 % of this realisation cost, including the labour, this was possible because the labour was highly assessed.

So far, the built PSHs have been carried out with important grants.

The PSH project is still an on-going project, each PSH built has helped to improve the pilot project. We saw that the project was tailored for each house, according to the beneficiaries' demands and the veranda was always made as big as possible.

The built PSHs have been more custom-built (therefore more costly) rather than a low-cost project, which would be developed for as wide a population as possible.

Beyond the cost impact, the noted characteristic can be enlarged : each NGO has its own action field, and often its program location sites (in Beshud, MADERA - in Daykundi, ACF - Solidarité is in Bamyan, etc.). Even, the micro-credit institutions define their action areas, and often have their clients. Getting an important micro-credit involves having already gone through a successful first-credit process.

In this "aid-system" each NGO has its own very specific action field.

As we saw, the assessment highlights the fact that : "The project does respond to beneficiaries needs, but not their most pressing needs."

The PSH project is clearly a development project. The built PSHs were included inside aid programs. If the GERES wants to join the large development project target, in the future GERES and NGOs have to become less involved : developing a large scale project cannot be restricted to implementing social programs. And the two are not mutually exclusive.

RURAL AND URBAN AREAS

The PSHs which have so far been built were mainly in rural areas. With the same process, some were also built in (peri)urban areas :

- GERES followed the PSH constructions throughout
- NGO partners created the links with the local context (population and institutions), a selection of beneficiaries and implementation.

In rural areas, the NGO partner is recognized as a partner by local representatives and inhabitants : which is essential.

Implementing the project in urban or in rural areas requires different needs.

THE PSH PROJECT POTENTIAL PARTNERS

At this level, we need to approach the specificities of each partner and their relations, to define the possible types of development. It represents 4 key levels :

- the contact with the (local) authorities – working with the community, promoting the PSH ;
- the veranda construction and the technical solutions – building the veranda and following the quality of what has been built ;
- the selection of beneficiaries (mainly with a social aim) – establishing appropriate vulnerability criteria ;
- Access to the cash to pay for the veranda (mainly, so as not to create an imbalance in a weak budget) – establishing the funding part and following the credit part.

GERES – TECHNICITY HOLDER

The GERES has offered a passive solar project. And the pilot project has proved its efficiency. But :

- The various constructions done and difficulties met, as explained above, have shown questions linked with the veranda completion. Only the GERES can capitalize on the results of these attempts, and suggest one or more solution.
- A wide-spreading project, although its is an "simple" object, involves describing it precisely.
- Because all the existing situations are different, the project has to classify them and offer the solution above. Mostly if the GERES is not in charge of its realisation.
- GERES has no abilities in the social or financial field, and does not wish to include them.

(NG)ORGANISATIONS IN CHARGE OF THE VERANDAS REALISATION SUPERVISING

Curently, the GERES choses its partners in relation to the knowledge of the rural geographical context they have. In Kabul, we can note there was a difference between what this partner

(Afghan NGO) had to do and what he did (beneficiaries selection, authority contact). It is necessary to define the role of each partner and its own responsibilities :

- Between the technicity holder (GERES) and the potential finance partner, what is the exact duty of the (NG)organisation in charge of the PSH project implementation ?

The question is twofold :

- If three partner organisations are necessary to implement a veranda, how is it possible to minimize the cost, and how is it possible to imagine the project evolution without these organisations ?
- Is there a difference between a NGO (like international NGOs), which has defined development or emergency programs to implement, within which PSHs can be built (as was done in Bamyan with Solidarité or in Beshud with MADERA), and a local (and small) NGO which realizes or implements a program on site (as was done in Kabul district 13) for a partner.

This difference should be noted. In the first case, the partner NGO is in charge of the implemetation of a social program, it carries it out (including helping fund or micro-credit if necessary). But, the program is defined : in terms of beneficiaries as well as in term of duration. And it is difficult to imagine a long-term development that can be appropriated by population in any way other than through self-replication. In the second case, the partner NGO role can be that of an additional organisation, between the GERES quality supervisor and the skilled workman. It involves a third organisation for the cash access : micro-credit organisation, and needs to include social competences to reach the social aim.

FINANCE (MICROCRÉDIT) ORGANISATIONS - NGOS, BANKS

The microcredit organisation is a key point for the PSH project development. Even, the veranda design was done to be as cheap as possible, the targeted population is the vulnerable households which cannot access cash (easily). The PSH is a housing product, which means, the payment will be an extra charge for the household budget, even this infrastructure will be cost-effective before five years.

- The PSH involves maintenance and, more important for the budget, the plastic must be changed even two years (each year if the lowest plastic quality is used). Indeed the credit plan have to anticipate this new cost.
- Because of the duration of the veranda, the PSH budget has been counted for a minimum seven years period, and will be cost-effective after more than two years. It is a very long time for the beneficiaries. It means, if the family has to pay for the veranda, they are going to have extra charges during at least three years. Specific attention have to be paid to this fact and the micro-credit proposed is subsequently.

The asked question is again between the two type of aims : is it a social project, where the organisation helps the beneficiaries to anticipate, or is it a market product (even cost-effective) with a specific micro-credit drawn for six months or one year. Then, if the project needs both, which are the rules of the micro-credit organisation and implementation organisation (NGO) and their relations ?

SUPPORTING INSTITUTIONAL FRAME - GOVERNMENTAL, INTERNATIONAL

As the evaluation report noted, the project is coherent with the Afghan government and donors policies. As this report notes, in the current Afghan context, no institution is able to integrate (or lead) this project in relation to its own competence field, but all agree with it.

More often than not, the institutions think about the wide NSP (National Solidarity Program) lead by the MRRD (Ministry of Reconstruction and Rural Development).

But, first, this program targets only, and specifically, rural areas. We saw Kabul suburban areas (outskirt of master plan) are under the responsibility of the MRRD, but this program targets the rural (and remote) areas. Then, the community is aimed (not the households). One of the aims of the NSP is to build a CDC (Community Development Council). Lastly, the CDC suggests the project, the type of intervention. Offering the PSH project implies knowing it, beforehand.

In the rural areas, it could be possible to join this program, but it can not be everywhere (not all villages were elected for the NSP) and it seems to be foolhardy to link the PSH project to the NSP. The NGOs able to lead the PSH project in rural areas must give their opinions on this possibility.

Even, for rural areas, the MRRD is obviously the right partner.

Currently, the MEW (Ministry of Energy and Water) supports some passive solar projects led by GERES and GTZ. But they are on public buildings (schools, hospitals). These projects target energy saving and comfort, but the beneficiaries are the government (energy save) and the community (comfort).

For the (sub)urban areas, the former MUDH (Ministry of Urban Development and Housing) became the MUD. This recent transformation convey evolving government situation, where it is not easy to identify the right partner. Yet, the housing administration are often in charge of implementing (and building) social housing. Improving individual welfare is not on their list of priorities.

Eventually, UN Habitat leads programs providing new settlements for returnees. In this aim, house models were drawn, even neighbourhoods. But in this case, two ways can be approached.

- The purpose would be a proposition for new houses, and the project (veranda offered) requires to respecting the UN standards.
- For the on-going allocation sites, where houses have already been built and population are living there, building verandas will improve their vulnerable life. But, this site was chosen in inhospitable sites and not necessary well-oriented. Because these sites have been planned, the houses have similar form and orientation. It could be check if a specific veranda model can be designed.

It seems, it may be possible to involve the Afghan institutions in the project for public or community targets, such as new constructions with new standards.

DISTRICT & PROVINCE (MUNICIPALITY) LEVEL

▪ **In Kabul**, the district level is in charge of district area management, and the reference level for the *wakil* (neighbourhoods representatives). The Kabul municipality has a ministry level and is in relation with the MUD, specifically currently when the new master plan is under discussion. The main (economic) stakes are in the center, it means the area covered by the master plan. This way, the individual housing in the Kabul outskirt is not a priority of the municipality. The district is the medium level, always institutional one, between community and municipality. It depends on the aims chosen for the PSH project, the district level can be a helpful level. But currently, we have very little information on its own reality.

▪ **The district 13**

On the last working mission day in Kabul, we have saw a (mini) master plan for the district 13. It was done under on request of the municipality vice-mayor and recently approved of by the Municipality. It defines "non-aedificandi" zones (some can be already partially built) and widening roads, including houses demolition. The PSH project would pay attention for the house beneficiary selection.

▪ **In rural area**, the district become a key institutionnal level, when the province is a wide area. In these remote places, the person can be more important than the institutionnal role. The partner in charge of PSH implementation in the area is in charge of these relations.

In Kabul, the impact of this intermediate level is more technical and therefore effective. In rural areas the district is more a level inside the institutional system.

COMMUNITY LEVEL

The community is not primarily concerned by the PSH project. As we have seen, the project mainly targets the households. But, the community level is the institutional representative for a community scale project. And, the community level may appeal to their knowledge of the context and to guarantee if it necessary.

Gosar is the administrative level under the district,

Wakil is its population representative.

The *Wakil* are elected by the inhabitants and represents them in the institutional framework. They know the history of their *gosar*, as well as the strong property conflicts. In the current chaos of Afghan property concept, it can be safer to have advice on it, before acting. Indeed in a situation where recognized title deeds are rare, the actions carried out by an international organisation (even though it is not the point) are not neutral.

Finally, some micro-credit organisations require a signature from the beneficiaries and from a civil society representative to guarantee the credit. Thus, they use social balance.

HOUSEHOLDS, BENEFICIARIES

The PSH project success depends mainly on the sense that the households are going to take over the veranda and rebuild it, year after year.

The two (three) main keys :

- they are able to pay for the veranda (helped by micro-credit) ;
- they understand it is important to keep a good maintenance ;
- they are able to replace the plastic film each year, and to pay for it (each year or every two years, depending on the chosen quality and the done attention paid).

Different issues are raised, in relation with the project action plan that will be chosen.

- When the stage is funded, the NGOs in charge of the project implementation will be in charge of the selection of beneficiaries. The veranda is built by an acknowledged skilled workman and controlled by GERES.
- In the micro-credit financing stage, the households request the credit and manage the construction process. The veranda is built by an acknowledged skilled workman and controlled by GERES.
- In a veranda-market, The household demands and manages its budget for the veranda construction. During the built-market stage, or/and the funded stage, the conformity between the built veranda and the PSH veranda model have to be under the responsibility of an acknowledged entrepreneur, and controlled by GERES.

Depending on the action plan chosen, the households do not have the same role. In the first case, they are beneficiaries (the NGO propose the PSH), in the second case, they are also beneficiaries (they are able to get a micro-credit), but they have to demand and refund the cash provided by a micro-credit organisation. In the last case, they have to manage their choices. In all cases, GERES is responsible for the quality of what would have been built during the first stage, and supervises the veranda construction in the first two cases. If it is the GERES choice, it is possible to offer a funded veranda and allow grants for each construction.

PROFESSIONAL LEVEL - SKILLED WORKMAN (CARPENTER) / CONTRACTOR

This is a key point of the project, the verandas are built by skilled workmen. Technically, the veranda is not difficult to build, and the required skill is not high level. Then, is it easy to train the skilled workman. But, for this reason, this competence might not be well recognized and it could bring about bad situations. If the project means to promote self-appropriation and self-replication, the required skills are not simply carpentry, even though they are the most important to build the veranda the right way. In the interim stage, the "carpenter" (or team leader ?) can be in charge of technical communication.

From this point it is possible to draw two types of profesional skills.

- Traditional skilled workman, trained by GERES in the know-how of building verandas. GERES works by contract with him, each time is it needed. He builds the veranda under a supervisor check from GERES.
- PSH Contractor, fully trained by GERES in the PSH know-how (including veranda) and business know-how, including communication. In this case, the PSH contractor has to create his futur own business, including finding clients. The GERES has to follow and

help him throughout the first stage, and check the quality of the built verandas. That is easily acceptable if GERES helps the PSH contractor business (finding work and/or providing grants).

The second case includes many different possibilities, depending on the PSH contractor choice. For example :

- the PSH contractor can be a carpenter himself and works as a skilled workman managing his business, including communication with the inhabitants ;
- the PSH contractor can be mainly a team leader, with construction abilities, managing a team of carpenters (various sizes are possible) and developing more communication skills.

In the implementation stage, GERES has to manage the site sharing out and to help each PSH contractor regarding its own abilities and needs.

In the context of veranda-market emergence, GERES labelled the trained Carpenters or PSH contractors so long as they follow the right quality and guarantee good completion.

The survey done in November 2007 in the Kabul outskirts shows that only 10% of the improvement done last year have been undertaken by the house inhabitants, then the remaining 90% by daily skilled or unskilled workers. It implies that, in urban areas, a vast majority of households order the house improvement to workers. It may be very different in rural areas.

In rural areas, the greenhouses pilot project notes several other inhabitants demands to the supervisor, building a greenhouse in their garden. Even though as we saw, it is easy to build it by themselves.

These two remarks show there would be a potential PSH (veranda) market.

AID PROGRAM AND DEVELOPMENT PROJECT - Conclusion

The technical issues are under the responsibility of GERES, if it is a social program, although its management is not. Then there are two cases : implementing a funding program, with a locally-implanted NGO, or developing a veranda-market approach, from personal (households) decision. Both can either be in partnership with a micro-credit institution or not.

Throughout this chapter, we saw two aims, two ways of implementing a project and two skilled organisation types. Eventually, it is possible to design two models, as archetypes, each with its own needs and constraints, to develop the PSH project.

TWO COMPLEMENTARY MODELS**URBAN NETWORKS AND REMOTE SITES**

Therefore, there are some **important differences between rural and urban areas**

- Rural areas** : In mountainous regions remote villages are very small
- This traditional society is a homogeneous population with low income level
 - The building supplies can be low, the main bazaar depending of geographical areas
 - There is a need for recognized (and accepted) organisation by the local (area) partners

- Urban areas** : Monetarised economy
- High population density with mixed income level
 - Existing building supply network

- Land allocation sites** : Defined area
- Housing program with precise definition and led by an organisation
 - Very low building supply network (non-urban sites)

These differences involve different ways to develop a large scale program.

It is possible to design a table crossing the context characteristics and the development ways (linked with the two aims defined before) :

Development process type Local context	a Program implementation ↓ Aid approach	Involving a dynamic ↓ a market Processus	possible evolution in the Future ↓ project wich could be develop
Rural area			
Remote area	■		
Mountain region	■		
Agricultural plain	▣	■	→ new constructions
Urban areas	▣	■	→ new constructions
Housing sites (non-urban)	■	■ could be if close to a city	→ new constructions
Land allocation sites			
Shelter, Resettlement			

■ : PSH for existing houses

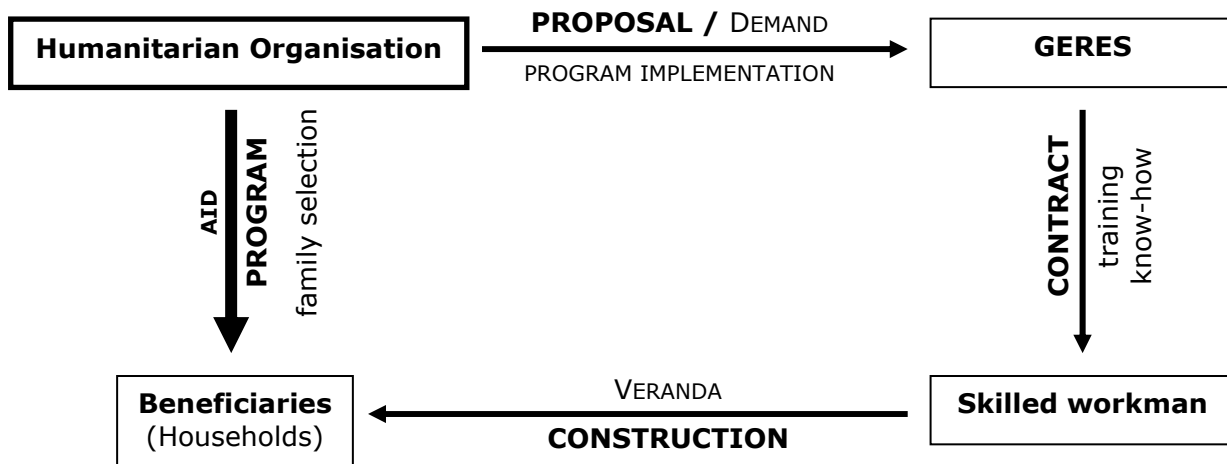
▣ : Possible PSH for existing houses, but not preferable possibility,
implementation has to be done regarding the market processus involved

■ : PSH for existing houses could be possible if the area is close to a city

Indeed, it is possible designing **two models to implement or to develop the PSH project**.

PROGRAM IMPLEMENTATION - model 1

aid approach with social aim



- **Program proposition comes from the humanitarian organization** (not including GERES: for exemple, partner NGOs in rural areas)

Thus, the program is planned for a defined area. And the demand for the program implementation, to the GERES, comes from the humanitarian organization.

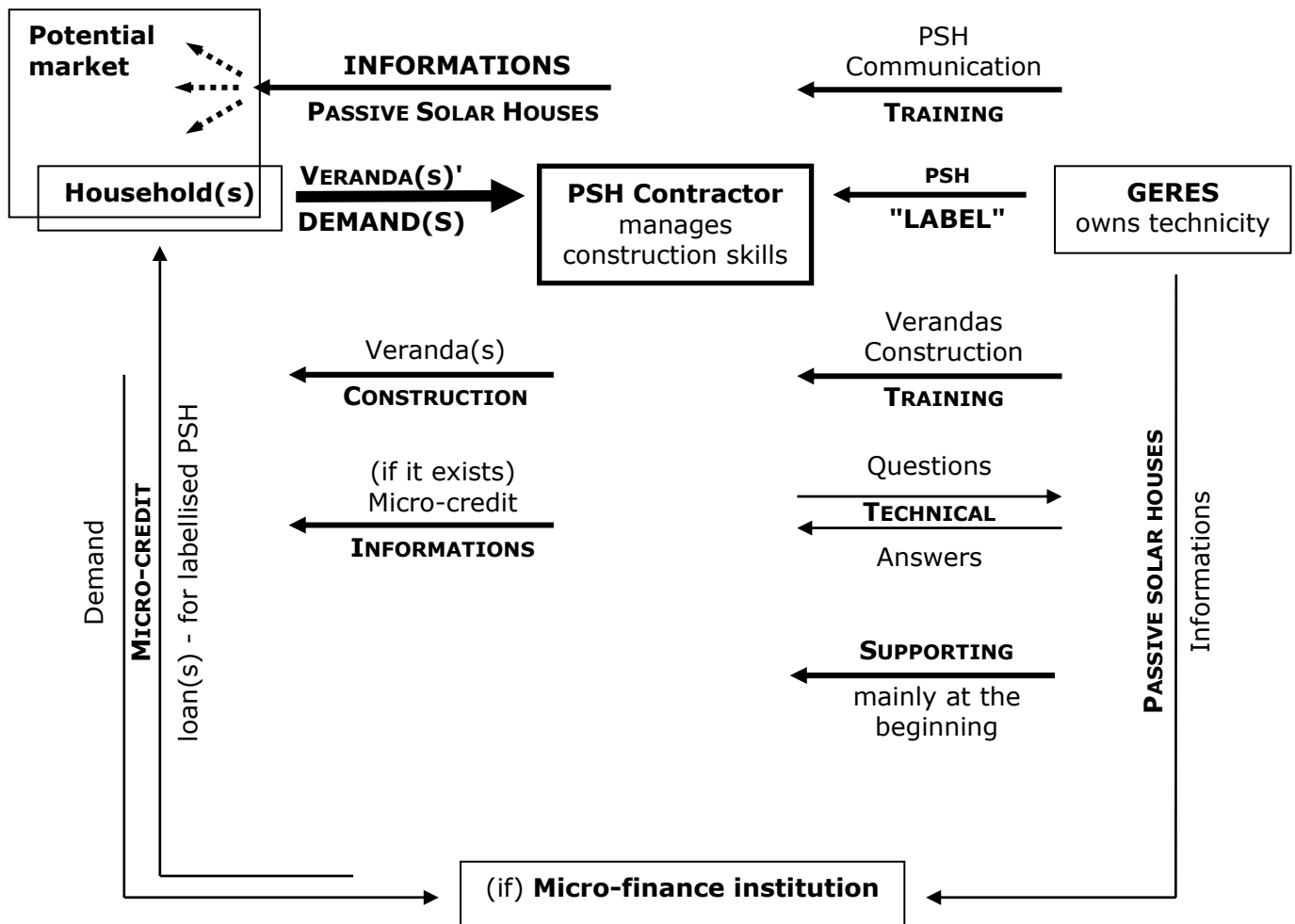
- The skilled worker has skills and has a customer network yet, he follows training from GERES to learn how to build a PSH.

- GERES is in charge of the constructions quality.

GERES has to adapt the project to the building supply network or to improve it.

- When the program is finished, construction can only continue by self-replication (inhabitants or skilled worker). **The Humanitarian organisation is the key institution.**

AN ENTREPRENEURSHIP PROCESSUS TO DEVELOP - model 2,
market approach, with society aim



- Demands come from the households

- First, the PSH contractor has to improve (to create) the PSH market : Veranda is like a product.

He has to convince the inhabitants of the PSH benefits.

The PSH contractor can be the skilled worker, or if he prefers, he will manage a team : different entrepreneurship levels are possible.

It is not necessary that the PSH contractor has a customer network before starting : he has to carry out a fully new project, within he has to create this customer network, linking with the PSH.

The contractor is responsible for the business : PSH customer network, building supplies, PSH quality, etc.

He is fully trained by GERES.

- GERES trains PSH contractors, helps them establish their enterprises and supports them before the market exists.

GERES is in charge of the follow up construction quality. It issues a "PSH contractor label", which guarantees to the inhabitants the quality for the veranda they are buying. Even, a strong relationship exists between the PSH contractor and GERES, at minimum during the first implementation project stage and for the subsidized PSHs.

- For the most vulnerable households, it would be important to have the possibility of micro-credit.

This PSH process is feasible if there will be a possibility to create a market : the main condition is a sufficiently high population density.

Subsidizing a product is often necessary to improve a market : subsidizing the PSH may be necessary to create its market.

When the entrepreneurship is working, GERES can retreat : the population represents the demand, as clients inside the market, and **the PSH contractor is the key organization.**

SEVERAL COMPLEMENTARY DEVELOPMENT POSSIBILITIES

TO BUILT A TECHNICAL NETWORK - Conclusion

This two presented development archetypes are complementary. As shown in the *context characteristics and ways to develop a program*, they depend mainly on the site context and also on whether a social NGO exists.

The two models can exist together if the program implementation does not make trouble in the on-going market process involved. If households think it is possible to get a veranda for free, they will not buy one off the PSH contractor. Being developed in the same area, or very near, requires for the social program to define very clearly its criteria.

In the agricultural plain, like Bamyan, the population density seems to be high enough to develop a veranda-market process and implement PSH contractor. In the remote areas or in the mountains, the potential market is not high enough, and the PSH will be done by trained carpenters. For GERES, it could even be very interesting to begin building a PSH skilled workmen network, linked with GERES. Then, with regular training and materials supplied, these skilled workmen could be a go-between to communicate about all GERES projects or the energy project partners. Is it possible for example to imagine a very simple demo-house network.

These several development possibilities leave time to the potential partners in rural areas : the large scale development project can begin in urban areas without their program. But, this flexibility will be not easy to manage.

GERES has to view the various possibilities and the different steps and stages that lead to it, and provide. Training for future PSH contractor with a professional training institution. GERES has identified already one which seems having abilities in relation to the PSH project needs. We have not met them because it was not possible for them during the second Kabul working mission in April 08. So far, this point could not be studied in this survey.

IMPLEMENTATION ON A LARGE SCALE**GOOD APPROPRIATION BY BENEFICIARIES**

Regarding the short possible assessment period the beneficiary appropriation is excellent.

- They use the veranda as a new particular day room during winter time, and the noted main activity concern sanitation (bathroom and warm water).
- Some of them use the veranda structure with a roof sun protection during summer, using the front of the house terrace as a living place.
- All the beneficiaries changed the plastic film when the old one could not be reused. Even though they are vulnerable, they found the money for it.

Only in one case encountered the beneficiary has paid a very good attention to the provided plastic film. It seems that after financing a new one, they pay better attention.

- The assembling and disassembling was done by the beneficiaries themselves, which is good. But, we could not see if it was a good realisation.
- About maintenance, the beneficiaries have reported airing the veranda, they replaced the wires when necessary, The wood maintenance seems to be done less.

➔ Currently, they are several questions without an answer. GERES should do systematic assessment for the built veranda : there are no logistic problems in Kabul areas. The assessment done aimed at appropriation by beneficiaries, but not at the kind of maintenance done and why.

➔ The main material quality is the plastic film. GERES chose the best quality, the beneficiaries have chose low to medium quality when they replaced it. An evaluation about performances and duration/price should be done.

➔ Propositions should be done by GERES promoting the use of the veranda structure and the terrace during warm season.

GOOD APPROPRIATION BY POTENTIAL POPULATION

- We can note several examples of self-replication, of individual building demands to the GERES surveyors and of personal veranda constructions without GERES PSH knowledge. These actions or realisations show the population is ready to appreciate, and buy, the PSH veranda.

➔ Then, a potential veranda market exists. If GERES wants develop the PSH project on a large scale, it can help this market to emerge.

➔ Communication on an extended population should be done explaining the PSH functioning and effective veranda characteristics.

PROJECTS STILL UNDERGOING IMPROVMENT

- The PSH project was not considered as a full-project in itself yet. Then, GERES staff abilities were used when they existed. But no specific skill was wanted. All the built PSH are used to improve the veranda construction, but this knowledge is not yet capitalized. An organisation often opens a project when it has budget to consider it itself.

- ➔ If GERES wants to develop the PSH project on a large scale, it would be time to consider the PSH project, as a full-one, with subsequent technical skills.
- ➔ If GERES does not want to lose the current knowledge, it is time to capitalize it, including the assessment done.
- ➔ Finally, developing a large scale project, requires making choices now, and designing them for the communication. It can be one technical file for each technical detail.
- ➔ Eventually, the low-cost models should be defined first by GERES.

≠ POSSIBLE AIMS, ≠ POTENTIAL PUBLICS, ≠ PROJET TO ENVISAGE

The various possible objectives aim at different household categories. Indeed, responding to the large scale development wish involves envisaging different types of project, and not only low-cost characteristics. Therefore, including aesthetics would be necessary. even though low-cost realisations require model constructions, allowing other veranda types could be a project evolution.

BUILDING A TECHNICAL NETWORK

The GERES aims we noted are : improving the use of renewable energy, limiting the wood (and bush, and dung) fuel consumption, are viable for PSH project, but not only. And likewise building passive solar houses includes veranda construction, but not only.

GERES is developing other projects. Then, building veranda is one target of PSH project, but not an end, in itself.

Currently, GERES is acting with partners to implement its projects on site. We saw that each organisation has its own aim. Through the potential veranda-market, GERES could have an opportunity to create a skilled workmen and PSH contractors (labelised) network. The choices they will have to do could be within this objective.

This would add another aim, but in fact it will be not on the same level. This one is about the issue of planning to plan a general frame for a sustainable development, in Afghanistan. The purpose is twofold :

- developing an action bearing in mind the possible action evolution ;
- acting and implementing GERES in urban areas, with an effective development target.

Actually, the GERES development programs are not effective in this way.

GERES has two targeted type of beneficiaries :

- Institutional, for passive solar building (school, health center), and these funded projects, are being implemented as construction programs ;
- Inhabitants (households), for PSH, green house, fireplace projects, and GERES wish to develop this projects on a large scale. The communication would have to be built in relation to the potential objectives.

As we saw in the last chapter, there is not only one (right) way to develop the PSH project, but different possibilities, according to the partner. It is possible to separate them in two main types : (aid) program implementation and generating an development project processus. Actually, one of the main difficulties would be to manage it both together.

THE PSH PROJECT AND PARTNERS

We have seen that having more and more partners in the project increases its cost and compromises its durability then. Yet, partners can be essential for two main reasons :

- in remote places, where the potential veranda-market is too weak to plan creating one, the population is mainly vulnerable ;
- to touch the most vulnerable population.

In these cases, the way of implementing is derived from emergency programs, even though the aim is development.

The NGO partners can be two (three) types :

- a NGO with its own aims (ACF, MADERA, Solidarités, etc.). those are interested in the PSH project because they are convinced of its effectiveness and to follow their own aim(s).
- micro-finance institution work as facilitators for the potential veranda customers, which includes its own running regulations.

Because it was not possible to meet some of the potential interesting micro-finance, it is not possible to be more effective about the possible way of following the project through organisations with them.

Finally, the small local NGO, considered as a potential partner at the beginning of this preliminary survey no longer was at the end. The missing GERES abilities is about the social part. And we have seen that the latter can be effective when the NGO already has its own aim (international NGO). When it is not the case, the NGO implements a program previously defined by GERES. This could be important in the case of program implementation with a previously defined social target (like the public equipment program). But for the PSH project it is not the case and including this partner is more costly than really effective.

A humorous remark in Kabul says "it is more easy to do a NGO than an entreprise" (it is easier finding funds than working to build a business).

SUSTAINABLE DEVELOPMENT IN AFGHANISTAN

Sustainable development has two main meaning :

- the aim project promotes sustainable development ;
- the way of implementation can be appropriate by the population and in long term the project will continue without grants.

The PSH project includes both. By an effective large scale development, it will have impact on the environment. By building up a process with Afghan society partners it joins the second. The proposition made considers the Afghan partners within the process, such as contractors and well-informed users.