

livelihoods

today and tomorrow

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Special
Supplement

Livelihoods Framework

Livelihoods Framework (LF) provides the required conceptual rigour for analyzing the situation of target communities and aids in intervening for sustainable impact. The quest of development workers is to ensure impact - bring in positive, long-lasting change in the lives of the communities they work with. But this quest becomes difficult as poverty is multi-dimensional and there are several causes for poverty. More than one intervention could be required to bring a family out of poverty, and a framework to identify all the interventions required, and the sequence in which they are required, would be a helpful guide to the development worker in the endeavor to ensure impact. LF fulfils the need for such a framework.

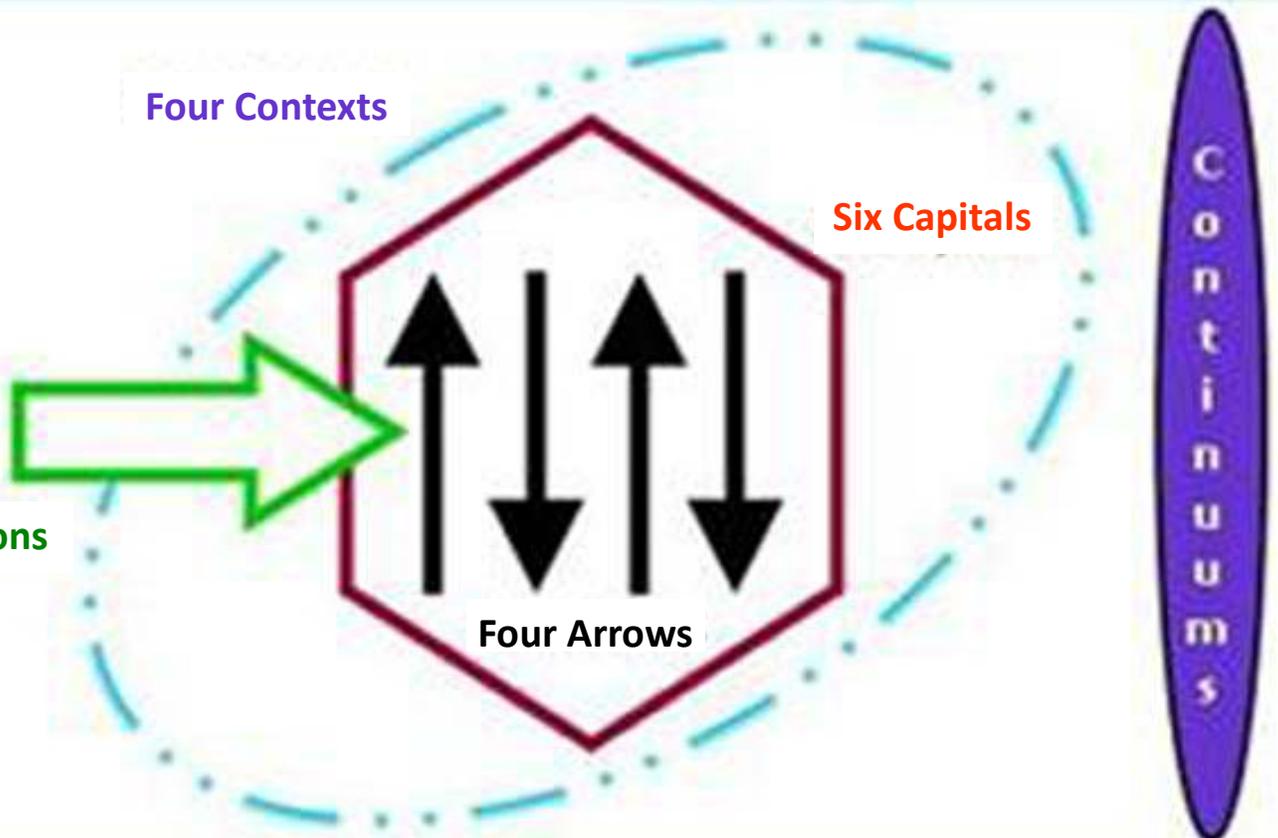
Four Contexts

Six Capitals

Interventions

Four Arrows

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I Introduction

Livelihoods Framework (LF) provides the required conceptual rigour for analyzing the situation of target communities and aids in intervening for sustainable impact. The quest of development workers is to ensure impact - bring in positive, long-lasting change in the lives of the communities they work with. But this quest becomes difficult as poverty is multi-dimensional and there are several causes for poverty. More than one intervention could be required to bring a family out of poverty, and a framework to identify all the interventions required, and the sequence in which they are required, would be a helpful guide to the development worker in the endeavor to ensure impact. LF fulfils the need for such a framework.

According to LF, every living person (and the household to which he belongs to) has a livelihood – most have multiple livelihoods. These livelihoods have four characteristics – income, expenditure, employment and risk. Change in the four characteristics of the livelihoods of a household in an appropriate manner constitutes development. The household itself strives to increase income, decrease expenditure (without sacrificing quality of life), increase availability of employment, and decrease the risks it faces; and thus moves towards development. Due to directional nature of the results aspired, we call these 'four arrows'. To get these four characteristics, the household uses six capitals, which exist in a context (described by four variables). Differences in various aspects of these ten elements (four arrows, six capitals and four contexts) lead to differences in the livelihoods strategies adopted by the households. Analysis of these ten elements and the way in which these elements interact with each other helps in appreciating the current status of the livelihoods of the household. This analysis would point to the set of interventions required to intervene for sustainable impact. The interventions, by working directly on the four arrows, six capitals or four contexts, result in positive changes in the four arrows, and result in impact. Any changes in the capitals or contexts not leading to changes in the four arrows is not development - at most, the efforts to bring about such changes can be considered to be in the direction of development.

The diagram on the next page summarizes LF.

II. Four Arrows

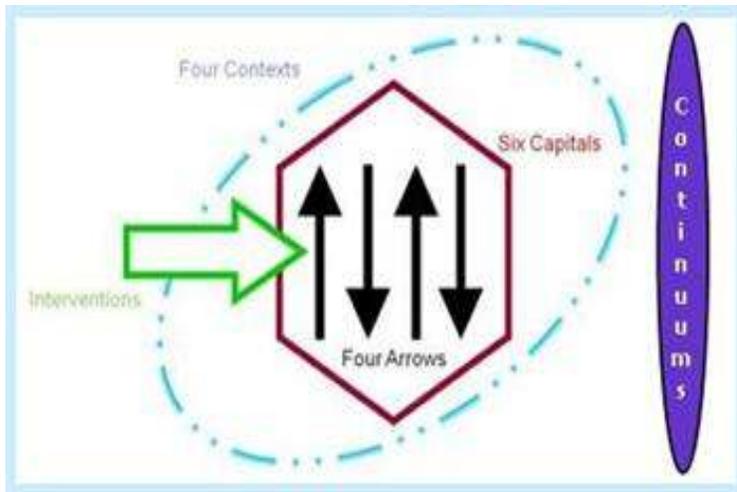
There are various characteristics/aspects to the four arrows of income, expenditure, employment and risk. Development can be brought about by bringing changes in these characteristics. Moreover, the characteristics of these four arrows in the present have a definite impact on the household's ability and willingness to use the six capitals and manage the context. Therefore, a development actor should focus on analysis of these four arrows and understanding them in their various dimensions. This understanding could lead to interventions that change the four arrows, which in turn changes the household's ability to own/access and use the six capitals and manage the contexts.

Income

The income of a household could be analyzed in several dimensions. Income could either be in the form of money or goods. It could be variable - in amount and in terms of time of income flows. This variability in income could depend on the person (time rate or piece rate) or circumstances beyond the control of a person. There could be differences in the investment (money, idea or energy) required to earn the income. Income could come in different streams, within the same vocation (e.g., from sale of leafy vegetables and paddy – both from agriculture) or from different vocations (e.g., agricultural labour in the village and construction labour at the place of migration). Sometimes, a person could earn the income, but another person might receive it (as in the case of an attached child labour, whose income is given to the parents). Some people might receive income in advance, i.e., before putting in efforts. Some get income by way of transfers (like pensions, grants, charities). Some income could be in the form of a windfall gain, like when a person wins a lottery or by some good luck in the market. Some members might voluntarily accept production related relationships (that impose constraints) to get income. For example, a person might accept not to

start a mechanic shop in the same village for an opportunity to learn the mechanic trade from an established mechanic. In another case, persons promised their contractor to be available whenever she called – and it was expected that these persons would abide by this promise even at the expense of working on their own small landholdings.

Fig.1



Another dimension of analysis is the relationship between value added and income earned by a person. In some cases, the income may be fixed, independent of the value added. In other cases, the value added by a person could have a direct basis on the income that person receives. In the latter case, if the value added has to be shared with others, the sharing arrangements become relevant. While scope for negotiation may exist in some sharing arrangements, the arrangement may be imposed on him. Those imposed on him may not be justifiable or could result in disadvantage to the person.

The differences in the deductions from the income earned could also lead to the households adopting different livelihood strategies. Some deductions are compulsory under law; some may be forced by the employer. The deductions could be known or unknown to the person earning money. When deductions are unknown, they could increase the variability of income.

The analysis could include the manner in which the income earned by more than one person is combined (as in the case of a joint family) in a household. Such combining of income could support the family in ways much different than if the incomes were not so combined. For example, where one of the two brothers worked in the town while the other took care of the family agriculture, the agricultural practices adopted would depend on whether the brother working in the town combines his income with the family or not.

Further dimension of analysis includes the time at which the income is received by the household – it could come at present or in future or in some combination thereof. The timing could present itself as a choice between two options – income now vs. income at some point of time in future, as in the case of farmer selling his produce. Selling later would give higher income, but could put pressure on him for labour payments at the present. Another consideration is the match between the income cycle and expenditure cycle. The choices related to income exercised by a family would depend on whether it can access money for expenditure when it requires it.

The issues relating to morality and legality of income add more layers to the analysis. It should be pointed here that the livelihood is of the people and hence morality and legality of the outside world should not be superimposed on the livelihoods. The concern with morality or legality is only to the extent that income interacts with other nine elements.

Expenditure

The purpose of expenditure and the appropriateness of expenditure for the given purpose is the starting point of analysis. Most expenditure is ultimately to survive, earn income, increase productivity or reduce risk. Some of the expenditure could be to maintain a network that would assist in earning income or reducing risk. Some of it is incurred to enhance the comfort level, i.e., to make the body productive after rest (or to rest while working). In a sense, these expenditures have the characteristics associated with investment. However, in some rare cases, the expenditure may not add value commensurate with the expenditure.

Expenditure can be analyzed in terms of money, time and energy, and not all these are equally recognized by the community. Monetary expenditure is the most easily recognized, while the expenditure in terms of time and energy is often overlooked by many households. Not being easily recognized, expenditures of time and energy tend to be the ones without a purpose or be one of the expenditure inappropriate for the purpose. Analysis should also include the dimension of perceptions. While some expenditures are perceived not be of any use (e.g., education of girl child), others may be considered useful (e.g., consumption of liquor). Another dimension of analysis is the manner in which the alternatives to reduce the expenditure are explored and used. Cases in point are using homeopathy/home remedies to reduce the health costs, cultivating kitchen gardens to reduce the expenditure on vegetables, etc. Studies have pointed out that there is some scope to increase the calorie intake without actually increasing the expenditure. Some studies even pointed out that the consumer can get better nutrition by spending much less, but such food is probably not palatable. Hence, poor spend more than the theoretical minimum required on food. The other

dimensions for analysis of expenditure include the methods adopted by the households to: (a) smoothen consumption across time, (b) match the income and expenditure cycles, and (c) decide between the options of investing a lump sum amount at one time vs. spending a low amount every time over a long period. These differences result in different livelihoods strategies among people.

Employment

Differences in several characteristics of employment can lead to households adopting different livelihoods strategies. Analysis of employment can include the timing and season of employment, match between a person's skills and employment, regularity of employment and process of search, payments to be made to search for employment, organized v/s unorganized nature of employment, human toiling required and breaks for rest, local rules associated with employment. (eg., both wife & husband should come; repay present employer fully before taking any other employment), rules associated with sickness, flexibility of timings/doing things at the person's own convenience, opportunity to grow in the value addition ladder, pressure to learn newer technology to continue to be employed (like repair of newer bikes for the mechanics), opportunities to learn newer technology, integration with the growth of the economy and sharing the benefits of the growth, availability of and access to support services (like persons who can repair the submersible water pumps), etc. On the social side, the aspects to be analyzed include the help received from family members for the work, social status associated with employment, satisfaction out of employment, defined work that reduces uncertainty/ambiguity, recognition for work, scope to get returns from the work of a higher quality, etc. Analysis also needs to include the differences in risks associated with employment. These risks could include risk of availability of and continuation in employment, injury, being exposed to disease carrying vectors, being away from the family for long durations of time, conditions of stay at the place of employment (as regards availability of shelter, water, security, primary health care in the case of migrants,) etc. These differences, along with the differences in the means available to cover those risks, and the accessibility and use of those means result in different livelihoods strategies.

Some vocations would require use of tools. In such cases, important aspects requiring analysis relate to the ability to invest in, own or access these tools. The rules involved in and flexibility in the use of the tools could be important. For example, certification of weights by vegetable vendors involves hardships. In the absence of certification, they become vulnerable.

Risks

Risks could be peculiar to the individual/household or common to the entire community; and both these require analysis. A community with a certain history of risks in its area/vicinity and with memories of the manner in which the community coped with these risks could behave differently from others with no such history or memories.

Other dimensions of risk for analysis are (a) the preparedness of the community and household to face the risk, to reduce the chances of the risk happening, to improve risk bearing capacity, (b) the options of relief in the case of risk happening and (c) the resilience to re-evolve after the risk happening (rehabilitation). Analysis of risks associated with employment is discussed above.

Differences in certain processes beyond the household and community lead to differences in the faith among the households on certain risk reduction/ coping mechanisms. These differences in turn lead to differences in their willingness to exercise various options related to risk reduction. For example, the poor in coastal areas find it difficult to keep the term deposit receipts and insurance bonds in safe places due to repeated onslaught of cyclones. They face a lot of difficulty in getting the benefits back (despite government orders that direct the agencies to honour the commitments even in the absence of receipts/bonds).

III. Six Capitals

Each household owns or accesses and uses six capitals to produce the four characteristics of livelihoods – the four arrows. These six capitals are:

- Natural capital
- Physical capital
- Social capital
- Human capital
- Financial capital
- Spiritual capital

Sometimes, the way these capitals present themselves might restrain or alter the livelihoods options available to the households. Analysis of the capitals starts with listing of the available stock, and goes on to an examination of the quality of the capitals, rules governing ownership, access and use of the capitals, and processes related to conservation, maintenance, rejuvenation, repair and efforts to improve the efficiency/productivity of the capitals.

Natural Capital

Natural capital comprises all the items that exist naturally around us – all the items that the God/Nature has given the human kind. It covers non-living creations like land, water, air, natural light, and living creations like trees, animals, birds, and insects. Land includes the land on which the house is constructed, the land where the shrubs that give us firewood grow, and more importantly, the land for agriculture. It would include the quality of soil, soil depth, and the small worms present in the soil. Dimensions of land that affect the livelihoods also include the slope of the land and the continuity of soil. For example, some places give us discontinuous structure in the land – it is rocks for 10 feet and for the next 8-10 feet and again rocks. In some other places, we see alluvial plains for miles together. Water, present in various forms like running water, ground water, rain, fog, dew, ice/snow and moisture in the air, impacts livelihoods options. Differences in these are starkly visible between the deserts and the coastal plains fed by rivers. But, even small differences like timing of rain and dew could lead to different livelihoods outcomes. The important characteristics of air are the wind speed, direction of wind, dust present in the air, other pollutants present, temperature of the wind and the duration for which the air blows continuously in a year. For example, if the wind is blowing with a lot of speed, sun drying papads or spices for powders could become difficult. Similarly, if the moisture in the air is higher, then making pickles or jellies could be difficult. The intensity of natural sun light and the number of clear sunny days has a lot of impact on the livelihoods. Sun light (and the heat that accompanies it) is a good fungicide. It also helps us dry our crops and various other products. Covered with fog, some Himalayan areas experience low sunlight even during the summers. This hinders the drying of nuts

like apricot and their commercial exploitation. Similarly, places that become cloudy during the evenings in summer are not suitable for preparation of mango jelly, even if the area is a mango growing cluster. Ladakh valley, being a cold desert, does not have too many foggy days and even winters have clear sunny days. This makes cultivation of vegetables using green house technology possible.

The other category comprises living beings. The trees include shrubs, grasses and weeds. The diversity of trees, their density, the age of the forest, and forest products present are the elements that lead to different livelihoods outcomes. The impact is moderated by the knowledge of the uses of trees among the local community. Animals, birds and insects help as well as hinder livelihoods options. Domestic animals are a resource in themselves and help the livelihoods in myriad ways. Similarly, game is an important source of food for the tribal communities living in the forest areas. On the other hand, the news of the elephants coming on rampage and destroying hectares of fields is common from Odisha and Karnataka. The wild boars descending from the neighboring forests restrict the varieties of crops grown, particularly the root crops like potato and sweet potato. The role played by the birds in naturally destroying the pests during land preparation stage is now well documented. But at the same time, birds can become pests and destroy the grain, unless the farmers guard their fields. Similarly, the termite menace in some areas makes storage of agricultural produce difficult. The help that the honey bees and butterflies render in pollinating is well known. The irritation caused by flies and mosquitoes could reduce the efficiency and quality of human work, apart from these insects spreading various diseases. Hence, listing the various species present in the area and how the community interacts with these living things is important for analysis of the present condition in livelihoods.

Physical Capital

All those that are erected, constructed and made by man constitute physical capital. Among such things, constructions are easily seen. These include buildings such as houses and community spaces, production facilities, service centres, service delivery connections, etc. Other items are tools and household goods/conveniences. Factories, industries, power plants, milk collection centres, bio-gas plants, vermi-compost pits lined with bricks, shelter for animals, are all examples of production facilities that support various livelihoods. Roads, sanitation are also part of this capital. Several service centres exist in the community - some may not be functional. These include schools, colleges, dispensaries, hospitals, veterinary dispensaries, temples, churches, post offices, police stations, other government office buildings, laundry shops, repair shops, retail shops, water tanks for water supply, etc. Several of the services that we enjoy require service delivery infrastructure. Examples include electric power, water, cooking gas, telephone, internet, radio, TV, etc. Apart from the above, we need constructions to use or restrict the natural resources. Examples are sea and wind breakers, dams to stop the rivers, tanks to store rain water run-off, irrigation systems and related channels. Others in this category are the hydro-electric plants, wind turbines, and mines. Constructions like warehouses, storage bins and cold storages help us to store our produce.

Another important category in the physical capital is the tools – those used by the artisans and self-employed people, as also those used in the large factories. We know that access to good tools can make a lot of difference to artisans; though of course, the skill to use the tools also plays a big role. Such simple interventions as introduction of a simple drudgery reduction tool can improve the efficiency of women and lead to gender equity. Experience indicated that mere possession of some tools by the workmen awaiting work in the labour addas (places where the labourers in search of work congregate every morning) increases his wage rate. Very simple interventions like the introduction of carborundum stone to regularly sharpen the carpenters' tools in the tribal area helped him service more clients. The vehicles we use in our daily life are tools for productive purposes.

The other category of physical capital includes the household items. The quicker these items wear out in a family, the better it is for the livelihood of the sales person. A household with a LPG based stove is probably better placed than a household that needs to spend some hours every week getting the wood from the nearby shrubs. The time chart and seasonality among the women belonging to these two households would be entirely different.

In addition to ownership and availability, the dimensions of analysis are the quality of physical capital. The aspects of quality related to the constructions, service delivery adhering to certain standards, availability at the right time and season, and regularity of supply/readiness for use. An example of quality is the type of house. Huts generally increase vulnerability. In the absence of appropriate light and air in some huts, even such simple processing as shade drying of objects may be out of reach for some families.

The issues related to the physical capital that complicate its analysis are the maintenance schedules and costs and the externalities involved in several of the common assets. Due to the externalities involved, the costs of maintenance are not necessarily borne by those who use the services. Hence, these externalities need to be detected, and managed towards internalizing the costs.

As in the case of other capitals, this capital not only aids livelihoods but also leads to some obstructions – physical and attitudinal/skill-based. When a simple irrigation canal is dug, it can increase the distance between one's home and his field by over 4 km. Similarly, the adoption of motorized boats calls for an increased dependence of the fishermen on skill that is not in abundant supply in their area.

Social Capital

Social capital is the support that a person/family receives due to the ties that exist between the families in a community. This capital is more like air, in the sense that it can be felt but not seen. Just as the subtle aspects of the breeze go unnoticed by many, the subtler aspects of the social capital are difficult to recognize and articulate by the community. Some dialogue, familiarity and capacity building of the community could be of help in assessing the existence and use of the social capital. The investments required to bring about this capital are time and energy in forging relationships. These investments can be leveraged later to provide the necessary supports in future.

Understanding the social capital becomes clear when the supports are visualized and classified. The first kind of such support is the result of bonding that exists between the people of a neighbourhood. The neighbourhood plays a critical role in several emergencies, small and big, and stressful situations that a family faces. On a daily basis, there are several exchanges of goods and services between the neighbours to even out some irregularities in consumption. A small glassful of sugar or milk when some guest arrives unannounced; some help in domestic work during severe illness; taking care of children when their mother goes out for errands – are all examples of such small helps without which the life would not have been easy. The role played by the community during fire accidents, death in a household or a missing child is all well known. This bonding, exhibited strongly among neighbours, also extends to the entire village or area and benefits an individual. Interviews with several migrants revealed that they came to know of the information regarding labour opportunities in cities and sites of migration through their friends and relatives staying in the migrants' village. They also stated that the success or failure after migrating depends to a large extent on the support provided by the near and dear at the site of migration towards shelter and food. This bonding creates the required networks that are the backbone of entrepreneurial success in many cases. The extent of interdependencies forged (with a robust reciprocity), the extent of good and sad moments shared and a pride in belonging to the community determine the extent of bonding. However, this bonding is influenced by many more factors like the inter-generational conflicts, leadership concentration and acceptance, the political and caste-based divisiveness. Another feature influencing the bonding is the distance between the home and place of migration. For example, though coming from different states of India, the bonding between the Indians in US could be higher. In contrast, within India, the bonding may be based on a specific state or specific region in a state.

The second kind of the support received from the community is the voluntary advice and work. We know of several cases where a graduating student helps the other students in their 10th class for exam preparation. In the past, the experienced elderly women used to provide support during the child birth. The consultations with a range of persons before finalizing a marriage alliance are commonly seen. In several cases, people have supported the

Panchayats in settling disputes and in making plans. The children of the SHG leader are seen helping the SHGs maintain their financial records. In all these cases, we see that persons with generalist or technical expertise support others voluntarily. In many cases, the villagers decide to take turns and stand guard during rainy days to detect breaches in the tank. In another case, the managers of the road transport corporation agreed to run a bus to a remote village on an experimental basis. However, they made it clear to the group of villagers (that met the manager in this connection) that if the collections remained poor for the first 10 days, then the facility would be withdrawn. The villagers recognized that this was a pump priming issue. If the bus was regular and its timings became known to the villagers en route, they would use the service. But, this propaganda would take time. Hence, the villagers decided to take turns and travel in the bus in groups of 10 people in each trip of the bus. The bus became popular in no time, and the people could stop boarding the bus only to maintain the service after the sixth day. But for such collective support to the cause, the maintenance of the facilities by some central authorities could be very different. The quality of the advice coming forward in a community is determined by the number of persons with such skills; the level and diversity of skills; the volunteer spirit in the person offering advice and the gracefulness with which the recipient considers the advice.

The third support by social capital is in the realms of collectives and enforcing obligations. A strong society is able to make rules relating to the usage and renewal of collective properties. Such society not only settles the disputes between persons amicably, but ensures that the obligations are met. Certainties in human relations result from this support. This support is also characterized by the presence of political and economic institutions. For example, the presence of strong institutions promoting representation (like labour unions) and collective bargaining (like labour cooperatives) can contribute a lot by providing support to their members at the time of distress. The economic institutions like land lease and its terms impact livelihoods forcefully. The role of government in maintaining law and order cannot be underestimated in the present society.

As in the case of the other capitals, the social capital can also hinder the livelihoods of the people. In one case, a household took to rearing pigs as an economic activity after making all necessary inquiries. However, the family had to sell all the pigs it bought due to ridicule by the neighbourhood. A strong social capital, based on inequitable norms, binds the persons to traditional/family based occupations and restricts movement across the economic strata. Such institutions could work to the advantage of only a few. Several cases exist where the extended families have restricted the migration to distant places in search of employment. It has also been postulated that a strong social capital discourages innovation. The presence of a strong social capital that hinders livelihoods of the marginalized could therefore require a much intense campaign and long drawn interventions, than otherwise.

Human Capital

Human beings, with their skills, knowledge, abilities, attitudes and aptitudes, are instrumental in contributing to the livelihoods of the individuals and also drive the progress of countries. It is these attributes that make human beings into human capital.

The human capital is important as it converts/combines/uses all other capitals to produce livelihoods outcomes. There are several examples to illustrate this point. Farmers on the banks of the river Krishna in Raichur district of Karnataka did not know much about the potential offered by lift irrigation, before PRERANA intervened. Thus, the knowledge was crucial in using the good natural resources present in the surroundings. Similarly, while the benefits of the SRI method of cultivation of rice are known, the adoption of the practice is limited among the farmers due to skepticism. Such attitudes come in the way of using the existing resources towards better livelihood outcome. Thus, the human capital plays a pivotal role in any effort to improve the livelihoods.

The human capital existing outside the household is as important as that existing within the household. Each livelihood is dependent on a set of complementary and supplementary skills that are required to be present in the

society. This understanding is important for analyses of the existing livelihoods and suggesting improvements. For instance, supporting the purchase of milch animals without ensuring adequate access to veterinary health services and training to the beneficiaries in taking care of the improved breeds resulted in several of the animals being sold out by the beneficiaries. Mechanization of agriculture, without any nearby service personnel, has only resulted in a limited use of the machinery supplied; thus wasting huge subsidies. Even entrepreneurial activity suffers due to the absence of such complementary human capital in the community. An entrepreneur started a coconut fibre (coir) factory in an agriculturally rich area. There was a lot of coconut available in the area. To make profit, the factory needed to be run for at least two shifts a day. But the labourers got abundant opportunities in agriculture and were not interested in the second shift. Labour would not come to work even if there was small community celebration/ household function in the village. These attitudes among the work force, while were consistent with the agricultural society, were not compatible to industrialization. The factory went into losses and had to be closed. In another case, a farmer procured a diesel pump-set to use the water present at shallow levels. However, he had to call repair persons from over 80 km for every small repair. This proved costly and the machine became idle after about a year of purchase. Thus, the human capital existing in the environment outside the household also influences the livelihoods outcomes.

One dimension of human capital is the skills. Several skills present in the community make possible, and assist, the livelihoods present in the community and the progress of civilization. Such skills could be vocational skills like those related to agriculture, artisan activities, teaching, industrial and non- industrial trades, medical and para-medical professionals, community animation and facilitation, etc. They could also be soft skills like finding an acceptable solution to complex problems, setting a purpose and infusing it among others, directing others' efforts towards a goal, and holding a group together. The communication skills of making a representation, negotiation, arguing convincingly, appraising others of the situation in the least possible time are all required in the pursuit of several livelihoods, not just a management career. The skills associated with learning also play a part in improving the livelihoods and enhancing the livelihoods options. A set of skills, like those possessed by people tending to entertaining and religious needs, make the continued existence of human conglomeration in present form a possibility.

Another dimension of human capital is the knowledge that exists in the society and supports the livelihoods. This knowledge could relate directly to the skill (like the knowledge of acids for blacksmiths), or could relate to the environment in which they live (like the local medicinal herbs and traditional medical practices). This knowledge could also relate to the markets – both local and distant, and also be the basis for networking with other communities. This collective knowledge can result in a better appraisal (as compared to that of an individual) of any option before the community. The knowledge acquisition could be either direct, vicarious or passed down the generations. The knowledge that is passed down the generations by custom, tradition or rote memory needs to be constantly tested for application, particularly if the circumstances change. Merely sticking to such knowledge may harm the community in the long run. On the other hand, such traditional knowledge is helpful as the new generation need not invent the wheel and go all round again. A scientific temperament and spirit of enquiry, with adequate reverence for the age old tradition, need to exist for the traditional knowledge to be most useful.

The third dimension of human capital is the ability to use the skills. This ability determines the extent to which the skills actually contribute to the livelihood outcomes. Even the most skilled goldsmith would not be able to turnout a good work if he cannot hold his hand steady or examine the finer aspects of a design on an ornament made by others. As a general rule, a person that lacks energy and vigour (of both the body and mind) may not be able to accomplish much. However, the abilities are of various kinds and the requirements could change with the job in hand. The person who ensures quality at a tea factory needs totally different abilities than a person who is in-charge

of maintaining a warehouse. The ability to bring the mind to attention for a long time could be important not only for book keepers but also for data entry operators. Therefore, analysis needs to focus on the match between abilities present and the opportunities that exist.

The fourth dimension is the aptitude for or comfort with learning new concepts, application of known concepts and adapting to newer methods of organization. This is becoming increasingly important as the livelihoods are changing constantly in these fast paced times. Newer methods of cultivation, newer designs in craft, newer places of sourcing, newer methods of organizing the production – all need to be learnt and learnt as quickly as possible. The more persons in the target group have these aptitudes; the learning gets quickly translated into better and diverse livelihoods.

The next dimension is the attitudes with which the persons interact with others – either in work or non-work situations. The team work, which is becoming ubiquitous these days, involves certain way of thinking and feeling about the others. These attitudes need to be inculcated/ promoted, by which the human capital can be improved. The attitudes towards emerging/ industrial/ service livelihoods are important as these facilitate the emergence of such livelihoods. In case there is an inability among youth to adjust to the constraints placed on them by the organizations, this needs to be studied as such inability leads to several costs, both to the individuals and the organizations. Such difficulty is more pronounced among the youth in the migrant families of urban areas and restrains several livelihoods opportunities.

Financial Capital

Financial capital helps human beings to obtain some goods for consumption (including investment). To live, a human being needs to consume several goods and services, which he obtains by four methods.

- Person collects some of these from nature and consumes them. Examples include fruits, roots and game available in the forests and fishes available in the rivers and seas. Essentially these are available for free and he only needs to collect them to consume.
- Person produces and consumes some items. Examples for this set include agriculture, backyard poultry, kitchen garden, etc. The core characteristic of this set is production for self consumption.
- Person obtains yet a few more by entering into an informal give and take relationship. Person has some excess papayas from his kitchen garden, and they are not so many that he can take the trouble of selling them. So he gives some to his friendly neighbour, who might respond by sharing a few lemons in the future. There is no strict one to one correspondence in these exchanges.
- To get some other goods and services, person has to depend on the market. In the beginning, this dependence was by way of barter. Later, money became the means of exchange. Thus, money enables the interaction of a person with the market.

Financial capital (or money and its access) influences the four arrows, via this route of enabling interaction with the market. In the absence of other capitals, markets themselves remain underdeveloped and money alone may neither be able to sustain the livelihoods nor result in the four arrows. For example, if a billionaire were to crash land somewhere in the Sahara desert, all of his money cannot bring him relief from the heat of desert or quench his thirst.

Financial capital has two important characteristics: stock and flow. Stock is the amount of financial capital one has or can access at any given point of time. This not only includes ready cash, but all the deposits that can be converted into cash. In rural areas, these also include the small ruminants like sheep and poultry that have ready market, apart from gold and other valuables that can be used as a guarantee for accessing credit. The reputation one enjoys in the credit markets, and the ease with which one can access it, are also part of the stock. The flow is the money that

comes from some activities like marketing agricultural surpluses, working for others, offering services, selling and merchandising, etc. They could also come from entitlements like pensions, interests on investments, trust disbursements, etc. The remittances of migrants are also part of the flow. Periodicity, regularity and predictability of flow influence livelihoods.

Other aspects contributing to financial capital include the institutional sources of credit, the money lenders, and the maturity of SHGs and other savings institutions present, the process governing the interaction of community with these institutions and the general rules that exist regarding the trade credit.

The other issues for analysis with respect to the financial capital include: (a) time of access, (b) ease of access and (c) security of stock held and in transit. The time at which the money can be accessed determines its value to the holder. A person would need money at the time of sickness, and he can't wait till the harvest about two months down the line to go to a doctor. This is also brought at the time of mismatch between the timing of receivables and payables. Unavailability of money at the time of need decreases the ability of the person to participate in the market effectively, reduces person's chances of income, and increases the costs of consumption and the risks. When the flow matches the requirements, these risks are lowered. One can participate in markets more effectively, use some other capitals with confidence, and thus achieve livelihoods outcomes. An assured flow also enables/facilitates the draws from the stock (or makes it easy to draw from the stock). The next dimension is the ease with which money can be accessed. A case in the point is the situation of woman in several households. She has to come forward and ask her husband or son, which in itself could be an emotionally stressful exercise in some homes. The woman may have saved some money here and there. But, she may be hesitant to take it out before her husband or in-laws and spend it. Hence, though money is available, it may not be easily accessible to her. This hinders her ability to use the money. The third dimension relates to the security of the stock of money held and during transit. The lack of such security is at the core of several ills seen among the platform dwellers and migrant labour. Most platform dwellers are prone to vices as they tend to spend all the money earned on the same day due to the absence of options to save the money safely. This spending reduces the amount available for them in the case of emergency, leading to an increase in expenditure during emergencies – they have to borrow money at a high interest rate.

Spiritual Capital

Spiritual capital is the specific quest present in human beings that makes them seek a better living than the present, and a spirit to fight in the face of adversity. This spirit is very strong in some but not so in several people. This spirit is exhibited by persons as a will to take one's destiny into one's own hand, seek, recognize and adapt to changes and persevere in the face of adversity. Persons with this characteristic sustainably benefited from an intervention by a project or from their own initiative. Persons who lack this 'will' do not benefit from improvements in other capitals or contexts. Moreover, they may even lose any assets that accrued to them under some assistance programs, as they do not recognize that change is expected of them as a result of the new asset holding. Thus, the spiritual capital is the alchemist's magic that turns all other capitals into livelihoods outcomes. A strong quest to change for better might even motivate a person to seek improvements in the other capitals. Therefore, this deserves a separate mention though it is covered as an attitude under human capital.

Different words are used to describe the quest indicated above. Examples of such description are:

- The patience or attitude of going the extra-mile
- Tenacity and perseverance Taking the initiative Willingness to change
- Accepting the restrictions placed by oneself due to new situations/livelihoods
- Taking ownership for the result

- Pro-activeness
- Action oriented
- Primacy of and focus on purpose; often associated with sacrifices in personal life. Strong will, to oppose even the world for something that they believe in.
- Making the most from the present resources and situation
- Having fire in the belly.

A strong urge not only to survive but also to improve the situation in which one lives appears to be behind all the above characteristics. The 'spirit' to persevere, fight, change and survive to improve the present situation, with a strong belief that the things could be changed for the better, is at the root of all the above described behaviours. Several examples like Braille exist where the person, in the face of adversity and when everything was lost, rebounded as a result of this 'spirit'. Hence, this urge to survive, persevere, fight and change is named as 'spiritual capital'. To give an analogy, the 'spiritual capital' is like the driver of a bus, in which a good engine, fuel, and all that are required to drive are present. It is the driver who gives the power to the inanimate bus to move forward. Without a driver, the presence of all the other essentials will not make the bus move along the desired path. On the other hand, if a good driver is present and senses that a vehicle is required in a particular situation, person would go and get one by hook or crook. Much in a similar fashion, the presence of 'spiritual capital' enables the household to use the other capitals to improve its present situation. Where required, a person with a strong 'spiritual capital' can improve the ownership and access to the capitals required. And the perseverance, combined with learning and action, pays. This is the essence of 'spiritual capital', which is exhibited in several behaviours listed in the discussion above.

The analysis of spiritual capital focuses on the extent of its presence among the community and the ways in which it has been exhibited in the past.

It needs to be noted that 'spiritual capital' is in no way related to the religion.

IV. Four Contexts

The livelihoods outcomes – changes in four arrows – that the use of six capitals can bring about depend on the context in which the six capitals and the household find themselves in. Two households could use identical capitals in a similar manner, and yet could have different livelihoods outcomes, which can be explained by the differences in the context in which the households and the capitals exist. In other words, context is the conditional variable in the livelihoods framework. The contexts, in turn, contribute to the presence, and quality, of capitals and their use. Thus, the contextual variables offer scope, as well as limit, the possible livelihoods options and livelihoods outcomes.

For the convenience of analysis, context can be divided into the following four parts:

- Environmental and ecological
- Techno-economic
- Distribution patterns
- Investment and expenditure patterns

However, it must be remembered that the context is one whole and the division is for analysis only. Being different facets of the same phenomenon, the parts interact with each other in a dynamic fashion. A very clear distinction between these may not always be possible. Similarly, the contexts influence the capitals so much that some confusion could arise in distinguishing between these. One important difference between the capitals and the contexts helps in clarifying the concepts: while capitals can be assessed and understood by looking at the household

and the village/locality, contexts can mostly be understood by going beyond the locality.

In addition to description of the existing context in detail, the analysis of the context involves a description of recent changes in the context, efforts of the community to bring about changes in the context, the manner in which the community responded to these changes, and the role of opinion leaders or other actors in bringing about changes in the context.

Environmental and Ecological Context

The environmental and ecological context denotes the larger natural and social environment within which a society (and the household) exists. The seasons, with all their sunlight and variations in climate, the moisture present in the air, the presence of vectors and pests that carry diseases and destroy crops over larger tracts, and sea water intrusion are all examples of the larger natural environment. Any slight change in any of these will largely disturb the ecology and environment.

The following areas in detail mention how this context interacts with the livelihoods of individuals.

- **Climate change:** Climate change is one of the major challenges we face as a world today. It is adversely impacting and will continue to impact agriculture production and incomes. The livelihoods of poor, vulnerable and small & marginal farmers will be affected at large and many of them are pushed back to poverty. In order, to combat climate change 'technology fix' alone is not sufficient, there is need to move towards climate resilient agriculture practices, adapting new technologies and sustainable way of living or moving towards simple way of living.
- **Human Identity:** In the larger social environment, human identity is the basis on which we work on livelihoods. Identity allows us to avail benefits. Despite having rights, acts and rules many of them don't even have identity and they are not being implemented properly. For example, conflict/war affected Syrian refugees, Rohingyas and people displaced by large development projects don't have their identity. Though people are born equal but they are not living equal. So, it is necessary for people having identity to help people in availing them.

Techno-Economic Context

This context tells us the state of progress on the technical and economic front, and how these forces act on the locale under examination. Techno-economic context determines how effectively and efficiently the goods and services can be produced using the resource base, and how the communities can interact with the markets to create wealth. It includes the policy climate and the interaction/exposure to outside markets. Other aspects in the techno-economic context are the distance from major markets, transition to service based economy, automation, utilization of demographic dividend etc.,

The following areas determine in which this context operates:

- **Over population:** The rate at which India's population is growing it is estimated that by 2024 India will be the world's most populated country surpassing China. Though, it's going to positively impact sex ratio and availability of young population. But it's going to test the country's resources both physically and financially. It will affect country's food security, employment, education, health and housing.
- **Demographic dividend and Unemployment:** Around two - thirds of India's population is less than 35 years of age. With constant increase in population growth this demographic dividend will remain intact for the coming three decades or so. For, India to be an economic super power, transfer the benefits to the poor it needs to churn and utilise the demographic dividend. Looking at present growth rate, contribution of primary sector to the country's economy, automation, people moving out of agriculture and inability to provide jobs in non-farm sector are leading to increase in unemployment. Though, Skill India initiated to address skill gap and unemployment it couldn't meet ever growing demand for jobs. With large labour force moving in to an

environment which doesn't have the ability to absorb them is leading to huge unemployment distress in the country.

- **Digital divide:** As a country we have progressed on digital front with a mere 50 million internet users at the start of 21st century to 460 million users by 2016. During this period the no. of mobile users has also increased drastically. Digital India continued to be focus of successive governments and this has helped in reaching out the unreached, reducing the cost of communication/transaction. Digital growth continues to dramatically change the life, living and livelihoods at large. But digital growth didn't fully penetrate in the rural areas leaving two-thirds of rural people yet to be covered by internet. This is leading to a digital divide between the urban and rural. Digital gender inequality has also to be reduced.
- **Foreign Aid:** As India is transiting from developing to developed country it has affected foreign contributions coming in to the country. The Foreign Contribution Regulation Act (FCRA) has further reduced it. But, at the same time government's spending for development and poverty alleviation has increased. With passage of Companies Act 2013, spending has increased in the form of Corporate Social Responsibility (CSR). Lately, Philanthropic Organizations like Azim Premji Philanthropic Initiatives (APPI), Reliance Foundation, HCL Foundation, and Bharathi Foundation have joined TATA TRUSTS in giving back to the community. Over the period role of NGOs has also changed from implementation to facilitation with large no. of community collectives coming up. Increased spending is also leading to increased availability of quality professionals to serve the poor and as the jobs are more remunerative, no. of people joining the sector is also increasing.

Distribution Patterns

Once wealth gets produced in a society, its distribution could assume various patterns. These patterns in distribution influence the livelihoods options and outcomes. These patterns become visible in the distribution of benefits of development, existing resources, know-how, income, infrastructure, influence and patronage by outsiders, knowledge, education, and exposure to outside world, skills, access to energy, technology, information, markets and reputation of the communities. The "World Inequality Report - 2017" detailed out the unequal distribution of wealth with 76% of the wealth generated went to the richest one percent and bottom 67 percent taking away 1% of the wealth generated. For example, a farmer produces a product and by the time the produce reaches the customer the price is doubled or tripled. There is a need to work on the entire value chain and find mechanisms in order to reduce the gap between the farmer and customer. So that on one hand the farmer gets better price for the produce and also customer gets the product at a lesser price. It is also important to increase the stamina of farmer in terms of holding the produce for a longer duration, availability of timely inputs, reduction in input cost, credit at lower interest rates, access to markets and availing Minimum Support Price (MSP) leading to a reduction in poverty and vulnerability of farmers.

In 2016, the world has adopted 17 Sustainable Development Goals (SDGs) succeeding Millennium Development Goals (MDGs). The first and foremost goal is to end poverty in all forms and dimensions by 2030. As all the 17 SDGs are interconnected there is a need to work on all the goals to end poverty. In India, implementation of poverty alleviation programmes/schemes will be a key driver to achieve the goals. It is necessary to ensure that all men and women in particular poor and vulnerable have equal rights to economic resources, access to basic services, ownership of land and other forms of property, appropriate new technology and financial services, social protection, housing etc., It is also important to ensure food security, reduce Infant Mortality Rate (IMR) & Maternal Mortality Rate (MMR), equitable education to both boys and girls, equitable availability and accessibility of safe drinking water, increasing adaptability to climate change, Universalization of health services, universal access to affordable and reliable modern energy services, safe and affordable housing services etc., In order to reduce inequality by equitable distribution of benefits of economic growth it is vital to strengthen domestic resource mobilization and international support to developing countries.

Patterns of Investment and Expenditure

It is recognized that investments are critical to the development of nations. Same is the case even with households. Therefore, the pattern in which the income earned is expended or invested to influence livelihoods. The patterns of investing in or making expenditure in securing food, clothing, health, housing, education, credit, insurance, production and employment are relevant in this context. So are the patterns of investing time and energy in acquiring knowledge and skills, and in improving other assets that the household possesses. Though some of these appear to be under the control of households, they are influenced more by culture, opportunity, exposure to financial instruments, past experience with these options etc., hence, they are beyond the immediate control of the household and are influenced by the context.

The following examples illustrate the impact of this context on livelihoods outcomes:

- According to Euro Monitor International, no. of people with disposable income of \$10000 has increased from 2.5 million in 1990 to 50 million in 2015. This increase in disposable incomes is leading to increase in savings and also on spending to lead a more quality life.
- Increasing in incomes is also leading to increased expenditure on quality health services, insurance of individuals, livestock and assets.
- Difference in family size can lead to differences in investment and expenditure patterns. The decision of family size could be influenced by religious beliefs and community perceptions, than the choices of the household itself.
- Such simple differences like preference of some people to plant trees with long life like mango or tamarind in their backyard can lead to different outcomes a generation down the line. These trees can yield constant income year after year without much work involved.

It is important to note the pace at which these contexts are changing is ever increasing. Over a period the pace will stagnate and willingness to move back is trending. As development agents there is a need to equip with the skills required to adapt to the pace of life.

V. Intervention

The community and development agent identify gaps and opportunities after having understood the present set of activities, and the four arrows, six capitals and four contexts within which these activities are being taken up. Analysis of these gaps and opportunities results in the formulation of a set of mutually reinforcing interventions. The gaps and opportunities could relate to: (a) the present situation of income, expenditure, day of labour and risk, (b) the present level of asset utilization and access, (c) the augmentation of assets, (d) the factor productivity, or (e) any of the contextual factors like changes in technology, markets, policies of the government, etc. Interventions would be designed to fill-up the gaps or realize the opportunities. Since there could be several gaps and opportunities, the critical gaps and opportunities need to be identified. These prioritized gaps/ opportunities form the basis for interventions. The principles of feasibility, viability, sustainability, productivity, equity and cost-effectiveness need to guide the prioritization of the interventions. These interventions ultimately impact one or more of the four arrows.

This process of developing an intervention plan needs to ensure the aggregation of the knowledge, skill and resource systems, and hence has to be intensely participatory in nature. This process is also important as (a) the meta-skill needs to be passed on to the majority of the community and (b) the capacities of community leaders/ facilitators need to be built to steer the community in adopting newer livelihoods.

Depending on the gaps/opportunities identified, multiple interventions could be required. The interventions could be at various levels: individual, household, sub-habitation, habitation, supra - habitation (or cluster) and sector levels. While some interventions might require no monetary support, others may require monetary support. As

more than one intervention could be required, and all these interventions will have to be implemented in a mutually reinforcing manner, the design of these interventions could call for networking among different development actors. The community itself may implement some, while the network of development actors may implement the others.

Promotion of equity, deepening democracy, and strengthening institutions and rule of law guide the implementation of all the interventions.

Mathematically, the livelihoods intervention can be expressed as follows:

$$Y = \sum_{i=1}^n (g_i - c_i) * r_i * d_i - \sum_{j=1}^m c_j * r_j * d_j - \sum_{k=1}^l C_k$$

Livelihoods 'Y' equals sum of revenue 'g' minus expenditure to get the revenue 'c' times risk involved 'r' times the number of days 'd'. All of this minus sum of expenditure 'c' times risk involved 'r' times number of days 'd' minus all bulk expenditures 'C' like expenses towards health problem, marriage, etc. There are 'n' streams of revenue, 'm' streams of expenditure and 'l' streams of bulk expenditure.

VI. Continuum

The proposed and appraised interventions within four broad contexts, supported by six capitals aimed to enhance four arrows shall work across the areas; Tribal, Rural, Urban and Emerging livelihoods, women and livelihoods, vulnerable people and vulnerable personalities. The most common farm and off-farm livelihoods of poor are agriculture wage labour, collection of forest produce, rearing of livestock, cultivating small piece of land or tenancy, fishing. The most common non-farm livelihoods are traditional livelihoods like weaving, carpentry, blacksmith, washing of clothes etc., the poor want to move to alternative livelihood opportunities within the employment continuum. Poor are not just producers but they are consumers, buyers, can add value, sellers and can also add newlines (skills, assets and opportunities).

It is important to work across and in depth of each continuum. For example, employment continuum – wage, job, self-employment, unemployment, underemployed, skills in demand and skill mapping we need to work across each item and in depth as well. We need to look at the entire portfolio of livelihoods of each household and facilitate support to livelihoods either at household level or collective level or both. This shall lead to move from consumption to access to finance to the strengthening of existing livelihoods to increasing the livelihoods portfolio.

VII. Conclusion

Livelihoods are a play of Six Capitals towards Four Arrows within the Four Contexts. An analysis of the ten elements of LF can indicate all the gaps and opportunities that exist in the present livelihoods situation. The analysis would also help in short listing the critical gaps that need to be addressed and the important opportunities that have the potential to drastically improve the livelihoods situation. These need to be the focus of livelihood intervention.

As the livelihoods are those of the people, these have to be understood from their perspective. Any analysis of the livelihoods would be incomplete without knowing the views of the people practicing these livelihoods. People are the best judges of their situation within the bounds of their knowledge, and have a reason for the assessment that they hold of the situation. Without appreciating this reality, it would be difficult to understand their present, along with the opportunities and constraints that come with it. Thus, the analysis must take into account the perspectives of the target community. In addition, the process of analysis must also strive to bring the outsiders knowledge also into the planning process.

Further, one needs to appreciate that a livelihoods worker needs to develop the skill of understanding and analyzing livelihoods. The livelihoods worker cannot aspire to be an expert in any particular livelihood, as the people

have multiple livelihoods and understanding the reality requires understanding inter-connectedness in these livelihoods, i.e., the livelihoods system itself. By being limited to one livelihood alone, as the technicians/ scientists do, the livelihoods worker might miss to understand the broader reality of the livelihoods system. Moreover, given that there are many livelihoods in any village, and sustainable improvement of the livelihood situation of the people calls for intervention in several livelihoods; several specialist workers would have to work in a village. Their plans and actions could pull the people in several diverse ways and create a chaotic situation. Hence, the livelihoods worker should not be a specialist in any particular livelihood but have the expertise to analyze and understand the livelihoods. ❖