

# **Sustainable Prosperity: A pathway for a prosperous future for all**

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## **0. Introduction**

### **0.1 Background**

Over the last twenty years or so, there has emerged a distinctive approach to problems in developmental action. This approach has evolved through the efforts of a broad collective of activists and researchers associated with a number of movements and civil society organisations. There are many distinctive features of this alternative approach and it is difficult to capture them in a single descriptive term. These distinctive aspects include: the way it approaches equity issues and access to resources, its approach to agriculture and allied production as biomass production, the way it approaches the problem of the large and the small, the way it approaches the problem of external or exogenous resources and endogenous resources, the way it approaches the problem of combining renewable and non-renewable sources of energy and materials, the way it sees the issue of people's participation and empowerment, including knowledge and control over their own resources and lastly the problem of dispersed industry and non-farm incomes.

There is also inscribed in it a way of looking at technology and most of its suggestions are backed by technology development that has either already been field tested or by others sufficiently developed to a point where it can be field tested within a very short time horizon of 5 to 10 years. These technologies and the resultant dispersed industrial system therefore constitute an alternative sustainable pathway of industrialisation based on the mass utilisation of renewable energy. In fact, all that the approach suggests as an immediate programme flows into and is suggested with a view to effecting a transition to a dispersed industrial system.

Rural development scenarios generally stop at agriculture and have no systemic connections with the industrial scenario they may propose. Ensuring rural livelihoods for the present population needs to be seen as a necessity, but only as a first step towards a long-term

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solution of the problem. We are a young nation, and in the next ten or fifteen years the number of persons seeking independent livelihoods is likely to double, and so it is very difficult to see only agriculture and allied sectors ensuring livelihoods for these new entrants. The approach itself must inscribe this need to flow smoothly into the second phase of non-farm incomes – a transition to a dispersed, prosperous industrial society. From this point of view one may call this approach an alternative biomass strategy for sustainable prosperity.

## ***0.2 A broad view of the concepts underlying the alternative approach***

### Concepts and buzzwords

In the NGO sector and the field of developmental action there are a number of buzzwords and equity, sustainability, participation, empowerment, etc., are some of the very common ones. They are buzzwords because they lose specific meaning and become general categories indicating possible good intentions. They all denote desirable objectives, but their usage has become very fuzzy. There is a need to discuss the concepts underlying all of these words, especially because the alternative approach is based very clearly on a particular understanding of these concepts.

## **1. Equity**

There used to be a good, old fashioned and simple word, equality. Developmental discourse today seems to have moved away from this simple and direct word and talk more about equity rather than equality. Instead of equal access we talk about equitable access. We need to understand what the change signifies.

Equality is an old word, and has been inscribed on the banner of all radical movements for social change since the French revolution – equality, brotherhood and liberty. They define it in relation to what they see as inequality. They see inequality as injustice and are committed to its removal. Moreover, they believe that inequality is the result not of the intrinsic worth of individuals but of the way we arrange our social affairs. It is the result of social structure, and the demand for equality has always been a demand for a radical social transformation, revolution.

Sometime after the eighties, as radicalism took a back seat and the globalised market system became 'accepted', slowly the word equality that still smelt of the radicalism associated with

it began to be increasingly replaced by the word equity. In this respect we would do well to explore and determine what the general use of the term equity means and what if any connection does it have with the earlier term equality.

### ***1.1 An unequal, differentiated society***

India is a highly unequal society. Class, caste or community (including ethnicity) and gender are the three major dimensions in which inequality manifests itself in India. However, even this broad statement has to be qualified; it is not very clear how the division between tribal and non-tribal and the inequality between these groups is subsumed under these three dimensions, nor is it clear how the question of religious minorities and communalism is covered by them. Indian society probably has many saving graces and is accommodative in many respects, but the deep-seated inequality embedded in its traditions and its social structure can hardly be denied.

We would do well to remember that this is so every time we speak of the village community or a hamlet or even of tradition as if it were an undifferentiated whole. When we say, let the village community decide, we should also be thinking on a parallel track, are we taking full cognisance of the inequalities that divide the community, the village? Our commitment to equity is not a compartment; it affects the very process of thinking.

### ***1.2 The shift from equality to equity***

Historically, this shift in discourse has been part of the growth of the voluntary, NGO sector. The NGOs emerged – as a whole, with a few notable exceptions – by distinguishing, and distancing themselves from the mass organisations and radical mass movements. In doing so, they also distanced themselves from the radical projects that characterised the radical mass movements. The emphasis was on what was immediately possible and practicable. On the other hand, over the years, there was a heightened awareness of inequality and the need to give expression to it and to deal with it.

This combination of emphasis on immediately practicable, pragmatic measures and a heightened awareness can create an extremely narrow and self-satisfying field of vision, especially in respect of tackling inequality. The processes of globalisation and liberalisation that treat an unfettered market economy as the norm and further restrict the options only to those compatible with that norm reinforce this.

The alternative approach also uses the term equity, firstly, simply because, it is now an accepted term within the discourse of developmental action. Secondly, in effect the alternative is also talking about what can be done without a radical restructuring of social relations. In other words, it points out and demarcates the space that is still available within the system. For example, what it says is that if we create preferential access to small parcels of land and limited quantities of water for the disadvantaged sections, then we can bring about livelihood assurance for them. In the alternative approach livelihoods have a central place around which everything is planned. Equitable access then is access that is just sufficient to create livelihood assurance, no more. This, though it requires preferential access to resources, it does not constitute a radical change in land ownership.

### **Livelihood**

We have preferred to use the term 'livelihood' rather than 'income' or 'agricultural income'. Needs and their satisfaction have central place in the concept of livelihood the way they do not have in income. Livelihood includes income, but also includes much more. Women, and to a lesser degree, children, for example, have a great deal to contribute to livelihood though they may contribute little to income within the established meaning of the term. There is also the possibility of a rise in income without necessarily ensuring fulfilment of livelihood need; one such example we have come across is in dairying and in vegetable farming which in many places has led to a rise in income but has also led to a fall in the quality of nutrition because marketing of milk and vegetables had begun to receive greater priority over their consumption.

Secondly, livelihood includes but does not restrict itself to agricultural income. This is especially important if we are to take proper account of the needs of marginal farmers and the landless. These are sections that have a need for income and employment outside agriculture proper in order to meet their livelihood needs. Exclusive importance to agriculture would not be able to take full account of their needs. Equally importantly these are also the sections that are much more dependent on eco-system resources outside agriculture proper and whose livelihood would be affected the most by any change in non-agricultural eco-system resource use. Thus, if we are to take proper account of and pay adequate attention to the needs of the rural poor and disadvantaged sections we need to start with livelihood as our central concept.

## **2. The Space Within and Beyond the System**

However, creating even this limited preferential access to resources for the disadvantaged is not an easy matter, and experience shows that it has only been possible where radical egalitarian concerns have had independent roots within the community, either through mass movements or through widely respected leaders who have had strong egalitarian commitment. In short, even in order to utilise the space available within the system, a live connection with radical egalitarian concerns is required. And, in fact, the alternative approach has been able to make this space visible only because it has had an organic connection with more radical agendas.

What is essential is that the demonstration of space within the system should not become an argument against thinking of radical reform, of radical change. Preferential access to small parcels of land should not be seen as an argument against or an alternative to thorough land reform, or even an equitable redistribution of land. It is possible to see it as a realisable first step in a larger agenda, than as an alternative to it. It is only if it retains an organic connection with the larger concerns that it can continue to explore and make visible the possibilities embedded within the system.

### ***2.1 Moving away from an exclusively land-centred approach***

The alternative also moves away from a purely land centred, and land-ownership centred view of inequality. In traditional pre-capitalist societies land was the central resource, and land ownership the sole determining factor of economic power. The alternative brings into focus the issue of resources and access to resources as a whole, especially the issue of treating water and biomass as resources on par with land.

Water and land together form the means of production in rural areas. If one acre of my land now receives water I did not receive earlier, my productive potential has increased manifold - it is as if I have acquired a few more acres of rain fed land. Creating access to water is therefore equivalent to enhancing my effective landholding. And redistributing access to water *equally* is then equivalent to a redistribution of the means of production -- it is creating a greater access to productive potential for the disadvantaged sections. What the Pani Panchayat experiment did with equitable water distribution in effect is a redistribution of the means of production in rural areas in favour of the disadvantaged sections.

## **2.2 Redistribution linked to creation and pooling of assets**

This is all the more critical to areas earlier devoid of water. By distributing water equitably everybody gets water, but they get water according to the number of mouths they have to feed. That is, it creates new productive potential -- or a potential productivity aid to existing resources -- and then distributes this new potential in proportion to socially assessed need. Everybody benefits, but the poor benefit as much. The most important principle here is the delinking of new water rights from pre-existing rights over land. This is the step that has revolutionary portent.

As a general principle, this need not be restricted to water. It may be extended to all resources generated through social action and support, or to resources that are of common pool nature along with creation of preferential access for the disadvantaged sections to those resources. That is where fodder banks, grain banks, biomass pools, etc., acquire their significance within the alternative approach. Without such measures developmental action creates resources, which are then directly turned into individual resources without any social mediation and control.

There is a corresponding widening, or generalisation in this approach of the way we view resources. Local materials like sands and clays, pooled biomass resources, local renewable resources -- all of them have productive potential. Realising the productive potential of these resources requires social action and support. Converted to pooled resources they have the potential of becoming a productive power placed at the disposal of the disadvantaged sections. It is for this reason that the alternative approach talks of access to resources rather than simply ownership.

## **3. Livelihood Assurance Provides the Norm**

This widening of the concept of pooled resources is not unproblematic. For example, this generalisation creates the problem of how far do we go -- does *all* land, all the water, all the biomass created count as pooled resource subject to preferential access for the disadvantaged sections? The alternative approach tries to tackle such issues through the concept of livelihood and livelihood assurance.

Livelihoods are central to the alternative approach. The approach treats a right to livelihood on par with an inalienable right of human beings. It is considered the duty of society to ensure that every one of its members is assured of a livelihood.

And so, livelihood needs provide the benchmark for deciding what accrues to individuals as a right. Water provided as a service to individuals is seen to be made up of two components, a basic service and an extra economic service. The basic service accrues to an individual (or household) as a *right* and its quantum is related to assuring minimum livelihood needs, and an extra service has to be provided out of the residual resource after meeting the needs of basic service.

### ***3.1 No planning without control and regulation***

Resource planning at a local level can only be effective if there is effective regulation of resource use at a local level. Social regulation of resource use brings in the question of the principles that should govern resource use and the medium through which the regulation should be carried out. Along with equity and livelihood assurance, sustainability and participation are the other two principles that govern resource use in the alternative approach.

## **4. Sustainability**

The meanings sustainability can take on are varied, ranging from a viewpoint that eschews any use of any external input, whether it is water or chemical fertiliser, to a simple economic view in which removal of all subsidies and assistance constitutes sustainability. We need to look at some of the major connotations that it has come to acquire.

### ***4.1 There is nothing static about nature***

The first point that we need to note is that nature is not a static system in which there is a single given ecological balance. It is an evolving dynamic system in which great global changes are taking place, in which continents are drifting, once dominant species have become and are becoming extinct, deserts form and once again become green, great riparian systems like the Ghaggar-Saraswati system simply disappear leaving behind them only the traces of their water courses, the magnetic poles of the earth shift completely many times over -- and all this without any human intervention whatsoever.

This is not to deny the seriousness of the problems human intervention has caused, but to emphasise that nature is a cauldron of change, far from the static, neatly balanced system in idyllic equilibrium that implicitly underlies the popular perception. This popular perception is based on a conception of a pristine, undisturbed nature out there and it is by implication that

part of nature that is relatively free of human intervention. It is for this reason that forests and wildlife form such a central part of this perception. Here sustainability is seen as an effort to preserve, conserve and possibly to expand this part of nature. The problem is not that this viewpoint is wrong, but that it is insufficient. We also need to think of what sustainability means in those areas in which we have intervened like agriculture, horticulture and industry.

#### **4.2 The criterion -- primary productivity**

The question is not whether we have been intervening in nature or not, it is how we have been intervening and what impact are we having. Here we need a criterion to judge what impact we have been having. The criterion that the alternative approach proposes is that of primary productivity of the ecosystem. So long as our intervention preserves, conserves and improves the *primary* productivity of an ecosystem we may say that that intervention is sustainable.

The primary productivity of an ecosystem is the productivity it would have on its own, without the use of inputs external to the ecosystem. The total productivity of an ecosystem is the effect of its primary productivity and the incremental secondary productivity due to the use of inputs like chemical fertiliser or water. Throughout the long history of agriculture, barring the last few decades, this has generally been the case.

In our viewpoint there is too much being made about simple avoidance of external inputs, hybrid seed, chemical fertilisers and the like. If such inputs are used in a manner that leads to an enhancement of *primary* productivity of an ecosystem, we see no reason whatsoever against their use. This is simply because, since *primary* productivity has been enhanced, even the withdrawal of those inputs would leave the ecosystem in a better shape than it would otherwise.

#### **4.3 External inputs and chemicals per se are not unsustainable**

Thus the alternative approach does not see the use of external inputs *per se* as unsustainable. It is that manner and level of their use that it considers when its sustainability is being considered. Firstly, it allows us much greater latitude for sustainable practises and since it allows the use of external inputs of water and fertiliser, it allows a much greater level of aggregate productivity. Secondly, given the environmental degradation, it is possible to use

external inputs to raise the level of primary productivity to a level where the use of external inputs may be eliminated or at least greatly reduced.

#### ***4.4. Biomass -- the measure of primary productivity***

Strictly speaking biomass refers to the total mass of all living beings within an ecosystem -- it would include the body weight of all plants, animals, bacteria and other microorganisms within the ecosystem. Life is organised as part of a food chain where photosynthetic activity of the primary producers produces the total amount of food in the ecosystem that regulates the number of organisms that can live within the ecosystem. For our purposes therefore we use the term biomass to mean the sum total of all vegetative matter produced in the ecosystem. It is in fact what regulates the aggregate biomass in an ecosystem.

Biomass, in this sense, is another theme that runs through the alternative approach. Biomass has been the main provider of human societies so far and the alternative approach views agriculture and all allied activities including horticulture, animal husbandry, fisheries, silviculture, pasture and forestry as all different ways of producing different kinds of biomass.

From this standpoint biomass production can be seen to be composed of two parts. One is the entire status of productive resources, the conditions of production that determine the primary productivity levels within the ecosystem. The second is that of biomass partitioning, of which biomass to produce and extract. The former, relatively speaking, forms the general conditions of production within an ecosystem. They then act as the base on which individual decisions operate. Improving these conditions, planting trees, ensuring recharge, better recycling and circulation of biomass within the system are matters which can be tackled and regulated socially even as sufficient initiative is left to the individual producers to adapt biomass production to individual needs and perceptions.

#### ***4.5 Biomass as energy***

Biomass is not simply food and other useful products; it is also energy. Food is encapsulated solar energy, so is firewood, and so is timber and that brings us to the other aspect of sustainability that we need to discuss -- the issue of energy. Ever since the Club of Rome raised an alarm about the speed with which energy resources were being consumed, the debate has raged and the issue has received increasing attention. Global warming and the need to cut down net carbon emissions have made it an issue of central importance globally.

Here sustainability is seen as a direction of reducing the use of non-renewable resources, particularly non-renewable energy resources. The problem is to switch over to a system that delivers useful products based on the mass utilisation of renewable energy resources.

#### ***4.6 Materials are also energy!***

The first important point that the alternative approach includes is its view of materials as energy. All materials also represent energy. For example cement needs energy to manufacture and a kilo of cement uses anything between 3 to 5 kg of coal equivalent energy. In this sense, using cement is tantamount to using that much energy. Conversely, saving a kilo of cement implies energy saving by the same amount. Energy planning and thinking, we feel has not given sufficient importance to the use of energy as materials.

Here biomass has a great role to play in bringing about energy savings. There is a range of technologies that the alternative approach identifies or has developed that can bring about significant savings in energy input as materials. This is especially important in a developing country like India, which suffers not only ill effects of the nature of development taking place today, but also suffers from lack of development itself. For us we need to see the energy saving in a somewhat different way: If the amount of energy involved in say providing a km of road is brought down to one-fifth of what it was, we need to see it as a possibility of making five km of road with the same amount of energy -- a way of making the same amount of energy provide a much larger development.

Biomass may be utilised as fuel, or as structural material or as a chemical feedstock serving as alternative route to petroleum based products. Examples are use of dung and residues for biogas, bamboo grids and mats as reinforcement for road bases and surfaces, and cassava used to produce ethanol as additive to petrol, respectively. In each of these uses it saves energy. In terms of coal equivalents, the energy saved when biomass is used as structural material roughly ranges from 2 to 4 times its weight and 5 or more times its weight when used as substitute for petroleum derived products. If only we treat biomass as energy and actively include it in our energy planning right down to local resource use planning, many more options of farm and non-farm incomes become visible. In fact it opens up an alternative pathway to a dispersed industrial society.

The alternative approach to energy is similar to that to sustainability described earlier. Just as the approach does not eschew the use of external inputs, here too the approach is not based

on an elimination of non-renewable energy resources and materials. Nor is it a small is beautiful type of approach that eschews large systems. For example, in most of the structural applications of biomass that it suggests, the composites comprise steel, cement and small dimension timber. Cement is planned to take compressive loads, wood to take tensile loads and steel to provide the confinement and connections to bring about composite action. Each of the materials is optimally used for the function it carries out best. The result is a member that matches performance but reduces cement and steel consumption by an order of five or more.

#### **Characteristics of the alternative technologies**

- They provide equivalent service in comparison to the applications they replace;
- They provide the service at a lifetime cost that is at least somewhat lower than the alternatives they replace;
- They bring down the non-renewable energy cost of service by a factor of the order of 5 or more in comparison to the applications they replace;
- By increasing the component of local materials and labour, they allow for a much greater proportion of the income generated to be retained within the rural economy and in the hands of the workers who add value to the biomass product;
- They call for and provide avenues of skill upgradation and development which have a wider potential; and
- They are based on modular designs so that they can become the basis for dispersed rural manufacture.

These technologies are based on preservative treated small dimension timber and bamboo, natural fibres and fabrics, and on biomass derived feedstock. They cover a very wide range of applications:

- Small one and two storey housing; community buildings of larger spans;

- Reinforced earth constructions and timber gabion structures for dams and water harvesting and storage structures and all kinds of embankments ranging from erosion and landslide control to flood control embankments;
- Alternative pipeline conveyance and delivery systems;
- Filters and linings for ponds and channels;
- Doors and window panels;
- Reinforcement and separation septum in roads and road bases;
- Energy replacing fuels in hybrid fuel systems;
- Energy replacing feedstock for alternative routes to petroleum products.

Each kg of biomass material in typical construction applications is expected to earn an income of between Rs. 2 and 3 per kg for the biomass producer and add value of up to Rs. 10 per kg, of which Rs. 7 are expected to accrue to the workers. They have thus the potential of opening up wider avenues of livelihood opportunities for the rural poor and the landless if biomass pools are formed and they are provided preferential access to them.

#### ***4.7 Beyond large vs. small***

Generally speaking, the alternative approach also does not necessarily favour small systems and sources over large ones. This is most apparent in its approach to water resources, where it considers unsustainable practices and their impacts in small systems as lethal as the unsustainable practices and their impact in large systems. Instead it calls for a restructuring of the relations between the two, by making water from large systems a stabilising supplement for smaller, local systems. There is no fetishisation of either the large or the small.

#### ***4.8 Sustainability is not just withdrawal of subsidies***

There has been too close an identification of sustainability and the elimination of subsidies. This is no doubt an effect of the winds of globalisation and liberalisation that are sweeping across the world. The alternative approach clearly does not agree with this identification.

Firstly, it needs to be noted that subsidies are very much in evidence in the developed countries including the G-7 countries as well, as is state presence and regulation and nowhere as strongly as in agriculture. That the free economies are subsidy-free is simply a myth. Secondly, we need to take note of the fact that subsidies are important instruments of redistributing social costs according to social priorities. Some of the subsidies are there for reasons of emergency fire fighting or for clearly spelt out social objectives and they can hardly be dispensed with. Thirdly, there is a distinction to be made between basic services and extra services that we have earlier alluded to. Since basic service is necessary for livelihood assurance for all it needs to be affordable to the large majority. In that respect, an element of cross subsidy in which those who pay for extra service also pay for making basic service affordable is perfectly reasonable and acceptable. The alternative approach generally treats the costs of operation and maintenance of a service as distinct from the capital recovery from such service. It advocates as far as is possible, the full recovery of the former costs, and attempts to restrict the subsidy to capital recovery components.

#### ***4.9 Capital subsidies and recurrent subsidies***

The distinction between capital costs recovery and operation and maintenance costs may also be seen as related to a distinction between recurring subsidies and capital subsidies. Capital subsidies are oriented towards creating assets, and the benefit from those assets is later expected to do away with the need for further subsidy. In general, the alternative

approach favours capital subsidies and avoids recurrent subsidies. This is an important point, as the alternative approach sees capital subsidy as an important instrument in switching over to an alternative pathway of development.

Similarly, within the capital expenditure component, it makes a distinction between those components that represent local materials and labour and those that represent external inputs, especially energy and materials. The outlay on external inputs represents a cost that a society has to actively bear, and very often finally translates into foreign exchange and aid commitments. However, the local component may be taken to represent income generation programmes and that outlay could be treated as an outlay on that account. In fact, at present employment assistance on EGS, NREGA and other schemes actually represents a recurrent subsidy and could be more productively spent as part of capital subsidy for developmental programmes and asset creation. The argument here is not against EGS or NREGA; on the contrary, to say that the expenditure under these should lead to asset creation.

## **5. Participation**

Participation is another one of the buzzwords becoming popular in the development action discourse. The need for an emphasis on participation has grown out of the fact that most governmental programmes have treated their own objectives and targets as of paramount importance, have devised strategies and institutional arrangements which effectively exclude beneficiaries from all decision making, planning and implementation functions. This is tantamount to a disempowerment of the beneficiaries in respect of programmes that affect their lives, for better or for worse.

### ***5.1 Avoid fetishising the local and the traditional***

However, there is also the other school which is responsible for making participation into a panacea, which identifies the central problem as one of lack of participation. This is so intimately tied up with some associated strands of thinking about traditional systems (if only we could now put traditional systems into place everything would be all right with the world) or with 'local'ist perspectives of different kinds (if only local people were given the right to manage their own affairs everything would be all right with the world) that it would be useful to treat them together.

All of them share a decontextualising of traditional or local systems. There is now a wealth of information on how traditional systems incorporated scientific principles, and this has been a valuable exercise. But there is also available similar information on how traditional systems and technologies divorced from their contexts have been unable to cope with changed contexts. For example, traditional techniques often have a risk-proofing element that trades off area for risk proofing but with lower productivity. Examples of this are high seeding rates and dispersed small farms locations. Both of these provide security against risks, but both of them trade off area in order to do so. They reflect and are well adapted to a situation when land was not a constraint. Today it is no longer so.

The point is that traditional knowledge has no intrinsic superiority over modern knowledge, its superiority is contextual. Even more seriously, the context in which most traditional systems and technologies were superior, no longer exist or are no longer valid, even in areas where they were prevalent. It is futile to expect that simply restoring them would do the trick, even though it is necessary to learn vital lessons from them. Moreover, it should be emphasised that the socio-political context that they had also had very clear lines of exclusion and exploitation.

### ***5.2 People may make wrong decisions, but they are not ignorant***

To be able to do this, we need to get away from the top-down viewpoint that sees people making 'wrong' decisions out of 'ignorance'. For example, though we need to recognise that left to themselves, people do not necessarily make choices that are sustainable and equitable, it is as important to realise that people do not do so without reason, or out of ignorance. There are often pressing reasons, for example economic compulsions, different set of priorities that may need to be uncovered and tackled. It is also possible that this is due to sectional interests being imposed on the 'community', a case the activists and agencies have need to clearly identify and tackle. It is also important that lack of information not be identified with ignorance! In fact, it is here that the role of development activists and agencies becomes so important. New information, especially if it pertains to a successfully tried out course of action and field visits and interactions can often radically alter users' choices.

Participative planning is in fact a process that involves an equal partnership between development activists and agencies on the one hand and the ecosystem users on the other. It

requires a joint investigation of opportunities for sustainable livelihood, even as the final decision making rests with the users. The almost inevitable result is a change in the perceptions of both the participant groups in the process -- the 'outsiders' as well as the 'local' groups, and there hangs another tale.

### **5.3 'Outsiders' and 'locals'**

The most important contributions that the emergence of the participatory approach has made are the emphasis that the decision making processes should be in the hands of the local people, and the range of useful techniques which have been evolved to explore and make explicit people's own knowledge of their own situation. However, the philosophy that has emerged tends to any expression of preference on the part of 'outsiders' as 'imposition' and tends to recommend for them a 'passive' role of merely 'expressing' people's viewpoints and concerns. This is, firstly, impossible, and secondly, breeds a special kind of hypocrisy that denies outsiders' own aims and concerns any influence even as it is exercised. In fact, outsiders need to be transparent about their own objectives, and need to recognise the various ways in which they influence the situation anyway. What is needed is a process that starts with a frank admission and clear statement of their objectives on the part of the outsiders, which relates to substantive issues and not simply of form, or, of participation itself as an objective. This will allow the first step towards a truly participatory mode, an explicitly negotiated agreement over the objectives of mutual collaboration.

### **5.4 Foundational objectives: Livelihood assurance, regenerative use and equitable access**

The alternative approach proposes that livelihood assurance, regenerative use and equitable access should be the foundational objectives of such collaboration. This is especially important because the latter two concerns do not emerge spontaneously and even if they do, they seldom acquire foundational importance, unless conscious attempts are made to address them as issues. It is then not an accident that participatory approaches have not been able to deal with issues of equity within the local groups, because at best they provide for participation of the disadvantaged sections, but can rarely create a commitment to equity. A meaningful consensus in this respect requires an explicit joint commitment to equity and the exploration of how other people and communities have attempted to bring about equity. It is only when such a process takes place that local people can decide how equitable could

be best assured in their situation. The `outsiders' certainly have a role to play both in making equity a foundational concern and in bringing accumulated experience and information from other areas and other attempts to bear on the local situation.

There is a similar situation in respect of PRA information. PRA techniques are valuable instruments in qualitative information and in exploring systemic relations. But they too have their own limitations that are sometimes related to the limitations of traditional knowledge systems as well. Only recently is the need to integrate PRA and other knowledge being taken seriously. There is a wealth of information that is now becoming increasingly easily available from the state and the scientific establishment about land, water, land use and water use and about local resources generally from a variety of sources including area studies and mapping to satellite imagery. This information and PRA information continue to sit in separate universes sealed off from each other. There is a great need to bring them together, to synthesise them. But this needs some common ground, a bridge to be established between them.

In this context the Participative Resource Mapping (PRM) techniques are relevant. These methods are not rapid methods like the PRA methods. The PRM is an extensive exercise that is completed by village volunteers who collect plotwise and householdwise information from every plot and household in the village. Plotwise information is collected on the basis of the plots marked on revenue or cadastral maps and they are familiar to the villagers. This creates both the necessary bridge between participatory data and the data with the scientific establishments, and is capable of incorporating quantitative information. PRM exercises have been conducted all over India as an instrument of participative planning, but especially in Kerala as part of the Panchayat planning programme.

In the last analysis, the role of the `outsiders' is to bring to bear all this information on the situation even while leaving the local community free to take their decisions. What is needed is that the choice so made be an informed choice, that it should be taken in light of a defined objective, and secondly, that it should be based on relevant information and knowledge, from both traditional and modern systems, about the range of opportunities available to fulfil that objective.

## **6. Capability Building – Human Resource as the Critical Resource**

There are indeed many organisations where the need for participation has not been a new discovery; it has always been a founding principle of their activity. Nor has the value of people's knowledge been a new discovery for them. For example, the people's science movement started their literacy campaign by expressly emphasising that illiteracy is not ignorance. But for them, the task has never been only to express this knowledge. They have always considered literacy as a tool for something more, as something that has the potential to open new doors of knowledge for the people.

This opening of new doors of knowledge and capabilities for the people is the positive aspect that is most often lacking in the prevalent participatory approaches, which have been too preoccupied with their own new discovery of the value of participation itself. Unless participation is wedded to clearly defined objectives relating to the content of social action, it tends to remain a formal instrument, lacking direction and coherence. The rapid and widespread adoption of its terms and discourse has only served to worsen the situation. In the context of the alternative approach, the participatory methods are an instrument of capability building with a clear direction, of regenerative use and equitable access as founding principles.

This involves a wide array of participatory activities. It involves first of all, planning, monitoring and evaluation and regulation of resources and resource use. Participatory methods are now being developed for periodic monitoring of resource use and status through records maintained and observations taken by a group from the village. This also makes demands on the scientific community of developing sufficiently robust and simple models for assessment of resource status and use as demanded by local communities so that they may later on be strengthened and refined by limited periodic information gathering and observations.

Secondly, it involves the capability of making best use of limited resources in a regenerative manner in order to maximise livelihood opportunities. The Prayog Parivar experience is particularly relevant here, as is the experience accumulating through the Low External Input Sustainable Agriculture (LEISA) network, and other networks and organisations devoted to various options of regenerative use. It would be of help here to organise modular farmers' groups like the crop groups of the Prayog Parivar, which were primarily farmer

experimenters groups who met together to exchange and seek information and knowledge and to develop and propagate regenerative practices. The scientific establishment has also to face a challenge here in evolving mechanisms and institutions, which can facilitate this process of learning through experimentation which is very different from the formal training and extension activity carried out by them. A similar kind of challenge is involved in facilitating groups from the disadvantaged sections who would take up non-farm biomass production and processing activity.

## **7. Synergies between Equity, Sustainability and Participation**

One of the important points about the alternative approach is its firm belief that the triad of equity, sustainability and participation does not always necessarily involve trade-offs between themselves that lower performance. On the contrary it assumes that there are ways in which the three can reinforce each other and the synergy will improve rather than lower performance.

### ***7.1 Dispersal and environmental upgradation***

Consider for example equitable access to water between and within regions as visualised by the alternative approach. The alternative approach first of all inverts the relationship between local and external water, starting with the development of local resources and adding external water as stabilising and augmenting supplement. It does not see one as a replacement for the other. Secondly, between and within regions, the water is dispersed very widely. Then, since livelihood assurance regulates the allocation and use of water, assurance of certain basic complement of water is available very widely within the ecosystem. The wide dispersal of assured water results in a general upgradation of the ecosystem as a whole and does not create high input based, concentrate "ecosystem islands" maintained at very high economic and environmental cost. In short, far from involving a trade-off of environmental benefit versus equity, it actually involves a synergy.

However, this synergy is not something that will automatically come about, unless there is a conscious effort at exploring and adopting those measures that pave the way for such a synergy. For example, water for livelihood assurance can become a benefit that comes with a condition attached, that certain environmental regenerative measures be taken up as quid pro quo. For example since with provision of assured water, livelihoods can be assured on a smaller area devoted to food grains, it should be possible to plant trees and perennial species

on the remaining area formerly sown to seasonal food grain. The synergy therefore is not automatic, it is premised on conscious action with a commitment to both poles.

### ***7.2 Participation requires perceived fairness***

Participation and equity also involve a similar synergy. If all sections do not benefit, or a few sections get a very major share of the benefits, it is difficult to ensure adequate participation. So, if equity is not ensured, it is difficult to ensure and sustain participation. Curiously, it works the other way round too, and if we do not ensure adequate participation of all sections, all the sectional interests may not be reflected and expressed, consequently there would be greater chances that they are left out of the benefits, leading to lower participation and so on. The alternative approach concentrates on devising measures that turn this positive feedback loop into a reinforcing, synergistic loop. The key here is ecosystem regeneration and primary productivity enhancement, if that is tied into the measures, they also create the expansion of the cake, so that even after prioritised allocation of the cake to the disadvantaged sections, everyone gets a chunk enough to justify their opting for the change rather than the status quo.

### ***7.3 Enabling legislation and policy advocacy***

However, if this approach is to become the basis of a countrywide process of transformation, if it is to become the basis of mass action on a wide scale it also involves a corresponding change in state policy and in legislation. The situation is best illustrated by the situation that obtains in Ralegan Siddhi and Hivre Bazar, the most well known examples of successful watershed development. In both these places efforts have been made to regulate water use by not taking water intensive crops like sugarcane, going for community wells with assured water share for the adjoining farmers, by banning bore wells for irrigation purpose, etc. However, it should be noted, that this is a purely voluntary social arrangement. People adhere to it out of social compulsion or conviction. And there is no legal provision to deter anybody who wants to violate these collective decisions. The social consensus arrived at on the basis of considerations of equity and sustainability and arrived at in a participative manner, do not have legislative support.

## Panchayats and resource management

The 73<sup>rd</sup> and 74<sup>th</sup> amendment take a big step in this respect by conferring greater powers on the Panchayats and the gram sabhas. However, there are a number of problems with it. The first point is whether Panchayats and associated gram sabhas are the appropriate units for regulation of local resource access and use, and whether they have the requisite powers to effectively regulate resource access and use at the village level.

Very often Panchayat is made up of a number of revenue villages or hamlets and too large a unit for effective management of its own affairs. The Panchayat boundaries are often determined on the basis of political and administrative convenience rather than on any underlying unity related to resources. A watershed of an appropriate size or a collection of them around a hamlet may be more effective so far as resource management at the local level is considered.

Secondly, panchayats do not have control over local resources, especially water. Depending on the scale of projects, different works come under the jurisdiction of different agencies. There is no convenient way in which external and local water resources can be pooled and utilised. The point is, that without effective control over resources, the only power that the panchayats are then left with is the power to spend money.

The problem is that in so far as resources are concerned, it is not a simple matter to identify what resources count as local and what do not. Or even of a given resource how much counts as local resource and how much does not. For example, a stream flowing by the side of my hamlet may have a catchment of a few hundred to a few thousand hectares; does the water flowing through form our hamlet's local resource? How much of it does and how much does not? Further when a dam is built a few hundred kilometres downstream, do I have or not have some right on that water, and on how much of it? If my area has uranium deposits or titanium ore, do those deposits count as local resources or not? The problem is that natural systems hardly respect the boundaries we draw politically. Nature, in the ultimate analysis is a whole, and it becomes more and more difficult to identify what is local resource.

The point is that here too there is a need to get away from sterile dichotomies which reduce them to absolutes: local versus external are categories which will always remain relative and what makes it one or the other is a social choice of where to draw the line, not some inherent property. Resource management is not simply a matter of turning over control to

local groups, there is a conscious interaction necessary between the local and the so-called external resource. If a local group can through its efforts and local resources mobilise 80% of the resources needed for livelihood assurance, it is the duty of the larger system and the right of the local system to be provided with the 20% resources needed for livelihood assurance.

The running thread should be clear, the result is bound to look like a combination, even an eclectic mixture of centralisation and decentralisation to those accustomed to think in clear cut opposites of centralisation (generally, bad) versus decentralisation (generally, good). This is because we believe that the right to livelihood includes the right to an adequate share of pooled 'centralised' resources from the 'centralised' system as much as local resources from decentralised system.

## **8. In Conclusion**

The foregoing discussion clearly shows that the alternative approach discussed here denotes a paradigm shift from the conventional approach to development. It has a distinctive approach to equity, to biomass production as harvesting the sun and as storing water, to cutting the Gordian knot of dichotomies like the large and the small, exogenous and endogenous ecosystem resources, renewable and non-renewable sources of energy and materials, to people's participation and empowerment, and lastly to the problem of dispersed industry and non-farm incomes. It is not an approach that stops at rural development, but sees and advocates a transition to a dispersed industrial system based on technologies that are either already field tested and proven or can be within a sufficiently short time span of say 5 to 10 years and do not require frontier area technological breakthroughs. This alternative approach may perhaps be best described as a biomass based strategy for sustainable prosperity.

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