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# **SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT**

by

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## Executive Summary

This paper reviews some of the major threads of the sustainable development literature and attempts to describe a framework to integrate the four areas that the U.S. Agency for International Development (USAID) has identified as priority sectors, environment, democracy, health and population, and economic growth, into the sustainable development discussion. The paper strives to clarify the concepts of sustainable development and the sustainability of project benefits within the context of the way USAID conducts its development assistance.

Many in the development community have adopted sustainable development as their rallying cry of the 1990s, reflecting changes in recent years in the factors that compel donor assistance. The end of the Cold War eliminated the desire to counteract the threat of communism as a motivation for providing aid. Growing evidence that decades of development assistance have not made inroads against widespread poverty has lead donors to reassess their priorities. Finally, a recognition of the ills of environmental degradation has driven development practitioners and theorists to adopt a longer-term perspective and greater concern for future generations.

USAID describes its vision of sustainable development as "characterized by economic and social growth that does not exhaust the resources of the host country; that respects and safeguards the economic, cultural, and natural environment; that creates many incomes and chains of enterprises; that is nurtured by an enabling policy environment; and that builds indigenous institutions that involve and empower the citizenry."<sup>1</sup> It goes on and suggests that "[d]evelopment is 'sustainable' when it permanently enhances the capacity of a society to improve its quality of life. Sustainable development enlarges the range of freedom and opportunity, not only day to day but generation to generation."<sup>2</sup> The *Strategies 94* document goes even further and adds that "[s]ustainable development requires investment in human capital...Sustainable development sparks changes within society, from the distribution of power to the dissemination of technology."<sup>3</sup> Furthermore, "[s]ustainable development mandates **participation**....It must involve, respond to, and be accountable to the people who will live

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*Strategies for Sustainable Development* (March 1994), page 3.

Ibid. p.3.

Ibid. p.3.

with the results of the development effort."<sup>4</sup>

Most of USAID's work is defined by and carried out under the four priority sectors of environment, democracy, health and population, and economic growth. Although these four priority areas are important individually, this paper suggests that their integration in country strategies and program and project design, implementation and evaluation create a whole greater than the sum of the parts. This greater whole acts as a working definition of sustainable development in the USAID context.

This paper proposes a concept of sustainable development whereby sustainable development depends upon (i) economic capital and macroeconomic policy framework, (ii) resource capital and environmental integrity, (iii) social capital and a development approach that considers social, political, cultural and institutional dimensions, and (iv) the sustainability of benefits that flow from development (donor or indigenous) investments. While expressing sustainable development as the integration of USAID's four priority sectors allows USAID to view its current operations in a broader light, the proposed analytical framework for sustainable development facilitates the formulation, examination and evaluation of specific policies that support sustainable development.

The concept of benefit sustainability, one of the necessary but not sufficient conditions for sustainable development, may be defined as the ongoing, dynamic process of continuing the valued outputs and outcomes of development activities. Sustained benefits of a given activity, the microeconomic counterpart to sustainable development, require (i) economic or financial capital, (ii) resources or natural capital, (iii) social or institutional capital, and (iv) the participation of beneficiaries.

Given these expressions of sustainable development and benefit sustainability, the paper presents preliminary suggestions for USAID policies.

1. USAID should encourage (i) the monitoring and evaluation of outcomes, and (ii) an emphasis on teamwork among staff, especially in the missions. This shift would require a change in incentives and a redesign of evaluation criteria.
2. Monitoring and evaluation of results should rely on multicriteria analysis. The collection and analysis of this data should facilitate decision making, provide motivation, and improve accountability.
3. USAID should shift from implementing projects to facilitating the design, implementation and evaluation of projects with a broad range of participation.
4. USAID should work with other donors to ensure that the range of donor activities support conditions necessary for benefit sustainability and, especially, sustainable development.

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Ibid. p.3. Emphasis in original.

# SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT<sup>1</sup>

## TABLE OF CONTENTS

SECTION	Page
1. Introduction	2
Assumptions	2
Objective	2
2. Sustainable Development (SD):	3
SD: The context	3
SD: A macro concept	6
USAID priority areas	7
Integration of priority areas	11
Towards a working definition of SD	13
World Bank SD concept and a comparison	15
3. Benefit Sustainability (SB):	18
SB: Some basic issues	18
Project sustainability: Concerns and a definition	21
SB: Assessment and guidance	24
SB is a micro concept	25
4. Linkage Between SD and SB: An analytical framework	26
SD function	26
SD function and USAID'S four priority areas	29
SB function	30
SB function and USAID'S four priority areas	31
Linking SD and SB	33
5. USAID Supported Projects	35
Four cases	35
Lessons	38
Validating the analytical framework	39
6 Policies	41
Focus shift and implied policies	41
Teamwork and evaluation	43
Results and accountability	44
Participation and shift in USAID practices	45
Recommendations for donors: Common agenda, coordination and leverage	46
References	49
Notes	53
About The Author	60

## **1. INTRODUCTION**

### **Assumptions**

### **Objective**

## **ASSUMPTIONS**

This paper deals with major aspects of development; nature of development, development as designed and implemented at the project level, and the policies relevant for such development. There are a number of underlying assumptions.

1. Development takes place by people's effort to produce and distribute goods and services they need for their well being. This requires a favorable environment in the form of availability of information and resources, incentives consistent with efforts and a helpful government that promotes supportive policies. The paper assumes that such development is basically a responsibility of people and their government.

2. Donor agencies promote the well being of people everywhere and are involved in supporting their efforts towards development. There are a large number of donor agencies but our interest here is with one of these, namely, USAID.

3. USAID, like all large organizations, has multiple objectives, such as economic, political, bureaucratic, defined by various constraints within which it has to operate. This paper deals with only one of these objectives, in our view the major one, namely, the concern for the well being of people in developing countries.<sup>2</sup>

## **OBJECTIVES**

The objectives of this paper are:

- (i) hopefully to clarify the concepts of sustainable development (SD) in the context of USAID and sustainability of benefits (SB),
- (ii) to develop an analytical framework for linking these two concepts.
- (iii) to validate this analytical framework from case studies of USAID projects, and
- (iv) to formulate policies for USAID implied in the move towards sustainable development.

## **2. SUSTAINABLE DEVELOPMENT: (SD)**

**SD: The Context**

**SD: a macro concept.**

**USAID Priority Areas**

**Integration of Priority Areas**

**Towards a working definition of SD**

**World Bank SD concept and a comparison**

### **SD: THE CONTEXT**

In a matter of few years, the term "sustainable development", SD henceforth, has gained currency. In an illustrative but not exhaustive survey of the SD concept Pezzy (1992) has identified a number of various definitions cum descriptions used in the literature in the past seven to eight years.<sup>3</sup> Russell *et al*(1994) have searched a great deal of literature. They find that there are many different descriptions of the term SD; different authors have used it to explain the phenomena they have been considering. There is little unanimity about the meaning of SD. They come to the conclusion that though there is no single definition of SD, the concept of SD is used both in literature and USAID agencies.<sup>4</sup> On the one hand, the SD concept, defined variously, is helpful in promoting changes in USAID procedures. On the other hand, the lack of an unanimity about a single definition causes confusion because different scholars and project directors describe it differently. A possible explanation is that SD refers to an enormous set that involves a very large number of elements. Different scholars look at either different subsets of this enormous set or give greater weights to some of the elements they are concerned with. They thus come to different interpretation.

The concept of SD has gained currency in a decade which has witnessed some fundamental changes in the economic and the global order. 1. There has been a breakdown of the Russian communist type system. With this breakdown the East - West conflict, which had determined policies and perspectives for four decades, has evaporated. It had a sanguine impact on the thinking and actions of development agencies and donors. A part of their preoccupation had been effected by the East West conflict. They are now more concerned with problems of 'development' proper. 2. There is the growing evidence about development itself. Even though major efforts have been

made, over the last four decades, by all concerned, including the donor and USAID agencies, development seems to have taken hold in a few places only. The goal of poverty reduction has eluded. It has again raised the question: what is 'development'?

3. There have been fundamental changes, both in the degradation of the biosphere and in awareness about it. There is a growing evidence, and recognition, that economic growth can, and many a times has, been accompanied by environmental degradation. This concern has been well articulated by the World Commission on Environment and Development in its 1987 report,<sup>5</sup>. It has emphasized that environmental impacts need to be taken more seriously in the development process. In fact this report popularized the idea of SD in the first place. Vice President Al Gore has further emphasized, (i) the nature of environment changes, and (ii) the conflicts in industrial production and environment degradation, in his best seller.<sup>6</sup> These three fundamental changes have forced serious rethinking about the development process itself. The concept of SD may be considered as an attempt to take into consideration these changes in fact and thought.

By now SD has become popular with virtually every government and agency dealing with issues of development. Some scholars wonder if it is not just a buzz word that agencies use because it is fashionable to call development, any development, as sustainable development. They ask; how is it different from development that has been pursued in the last four decades? After all, the object of genuine development policy was, always, to promote a sustainable process of development. There are others who argue that SD is different from development previously perceived and promoted. It is different both because (i) it is based on lessons learnt from previous experience, and (ii) it takes into explicit consideration some of the new realities and constraints.

Whether because it is has become fashionable or because there is a genuine questioning about the nature and quality of the development process, or perhaps for both of these reasons, literature on SD has mushroomed. The ecologists have taken a lead in this area and there are numerous articles on SD from the ecologically minded economists and scholars in *Ecological Economics: The Journal of the International Society for Ecological Economics*.<sup>7</sup> There is one or more articles dealing with various aspects of SD in virtually every issue of this journal. The other journal that has also

published a number of articles on SD in *World Development*. As Tisdell (1988) has argued, the ecologists and economists have looked at SD from different perspectives.<sup>8</sup> Government and Donor agencies, involved as they are in the development processes, have not lagged behind. They have also produced a lot of literature; a lot of it in internal documents and some contributing to public debate. For example, there are a number of internal and semi public documents dealing with SD in the World Bank. Some of these ideas have also been placed in public debate through various World Bank publications. *Finance and Development*, devoted a large part of its December 1993 issue on SD under the heading "Making Development Sustainable". It attempts to articulate "World Bank's thinking"<sup>9</sup> on the issues in this debate. It asks: "Eighteen months after the Rio "Earth Summit," what have we learned about how to implement development that is sustainable, and what conceptual and methodological issues remain to be resolved?"<sup>10</sup>

USAID, another important donor agency, has also been thinking about SD. Our concern in this paper is with, and about, this thinking in USAID. The question is: what are USAID's ideas about SD? As Russell *et al* (1994) points out, different parts of USAID have highlighted different characteristics of the various constituents of SD; thereby giving differing interpretations. USAID senior administration is now attempting to develop an emphasis on SD itself and incorporate it to make changes in its projects and policies. The basic pronouncements of this thinking are contained in its *Strategies 94 document*. It describes that SD "is characterized by economic and social growth that does not exhaust the resources of the host country; that respects and safeguards the economic, cultural, and natural environment; that creates many incomes and chains of enterprises; that is nurtured by an enabling policy environment; and that builds indigenous institutions that involve and empower the citizenry."<sup>11</sup> It goes on and suggests that "Development is "sustainable" when it permanently enhances the capacity of a society to improve its quality of life. Sustainable Development enlarges the range of freedom and opportunity, not only day to day but generation to generation."<sup>12</sup> The *Strategies 94 document* goes even further and adds that "Sustainable development requires investment in human capital.... Sustainable development sparks changes within society, from the distribution of power to the dissemination of technology"<sup>13</sup>[. Furthermore, "sustainable development

mandates **participation**. It must involve, respond to, and be accountable to the people who will live with the results of the development effort."<sup>14</sup> Thus described, SD deals with the economy and society as a whole and is a macro concept as contrasted with micro concept like a project design. It involves principles that apply to the whole society and a decision making unit, such as a government, that can develop a vision for the society and enforce many of these principles either by direct legislation or through necessary incentives.

For some policy makers and project directors this description may be too broad and inclusive. Involved as they are in decision making, they wonder how does it distinguish principles on which policy and decisions can be based? USAID has been operating over the last forty years. "Some feel that sustainable development is what USAID is already doing or can be doing with a little tinkering. Others feel that a major overhaul of the system and goals is necessary."<sup>15</sup> More recently, USAID has identified four priority area. How does this description of SD relate to these priorities? To relate SD, so described, with USAID's priority areas, we need to first look at (i) the nature of the macro concept that SD is and (ii) the four priority areas, as articulated in the recent USAID official pronouncements. We follow this up in the next two sections.

#### **SD: A MACRO CONCEPT:**

SD, as described above, requires a good deal of policy, and initiative, at the government level. It thus deals with the country as a whole and not its projects and sectors only. Even if one were to add all the work being done in the projects and sectors, it will not add up to the whole country; because the whole is greater than the sum of its parts. In this sense, SD is a macro concept while projects and sectors are micro concepts. Macro involves, and deals with, large units and variations while micro relates to small. Small variations are easy to deal with while large ones can involve complex interrelationships. Macro refers to a large entity with its own rules of behavior and laws of motion. For example molecules are macro units that are rather stable compared to its constituent components, electrons, neutrons and protons, which are micro and variable. The act of aggregating the electrons into molecules also changes its properties and

characteristics. There is a similarity in economics where there is macroeconomics and microeconomics. Microeconomics studies a system of markets where (i) every market is a price - auction market that (ii) clears by competitive bidding (iii) within a framework of supply and demand. Thus, (iv) every market is in equilibrium, and (v) all bidding are satisfied. By comparison, "macroeconomics is a study of markets that do not clear and are not in equilibrium."<sup>16</sup> Though macroeconomics is made up of micro units it is more than its sum. Not only is this more than its parts, the whole is very different from its parts. It requires different rules and follows different principles. In fact it is this fact which causes a good deal of problem in macroeconomics. SD, being a macro phenomena, is also greater than the sum of its parts.<sup>17</sup> It is more than the parts because of the various synergies involved in the interrelations of its different parts.

While SD is a macro concept, USAID work has been carried on in terms of projects and sectoral policies recently classified in four priority areas. By comparison, these priority areas relate to a micro concept. In the section below we look at USAID's four priority areas.

#### **USAID PRIORITY AREAS:**

Most of the USAID work is defined by, and carried under, four priority areas: namely, environment, economic growth, population and health, and democracy. It is these areas that determine its projects and policies. These four priority areas are important individually and jointly. They are important individually because many policies and projects refer explicitly to the particular area. It is also understood that there are interactions among them. These interactions impact on the success and failure of the individual area project. It is also appreciated that some policies and principles are relevant, even necessary, to the implementation of projects in all these areas.

The problem of environment is now well recognized; particularly after the mega United Nations Conference on Environment and Development, UNCED, at Rio de Janeiro. The concern for environment had been subsumed in "Agriculture and Natural Resource Management" issues. Some of the concepts of sustainability emerged from the need "to enable agro-economic system to maintain output in the long run."<sup>18</sup> In recent year, environment has taken a larger meaning and gained importance as of itself. Natural

resources involves agriculture sector as well. In economic and development literature, environment has been treated as a natural resources that has, and does, provide essential inputs in the process of economic growth, as well as the space where the wastes of the industrial production system are disposed. It is considered as one of the major externalities in economics that the markets are not able to deal with. Ecologists have considered economists view of environment somewhat limited. They contend that (i) economic system is a subset of larger, but finite, ecosystem, (ii) there are limits to the carrying capacity of ecosystems, and (iii) ecosystems are highly interlinked so that the activities in one place show up as effects at some other so that environment damage is, many a times, irreversible. "There is no such thing as free lunch."<sup>19</sup> This interconnectedness, especially in terms of its impact on environment degradation, makes the process of economic growth all the more difficult. That environment is more than natural resource is now well recognized in USAID thinking. Thus, "In USAID's core "sustainable development countries" its three fold environmental objective is" (i) "to safeguard the environment underpinnings of broad - based economic growth," (ii) "to protect the integrity of critical ecosystems, and "(iii) "to ameliorate and prevent environment threats to public health."<sup>20</sup> This view of environment is in keeping with the current thinking on this subject that involves taking into consideration perspectives from the ecological viewpoint<sup>21</sup>

In literature as well as in history development has been defined basically as "economic development."<sup>22</sup> The literature on "economic development" is very vast indeed and its history spans over four decades. In the fifties and sixties UN had formalized development decades. Development, being synonymous with economic progress, is measured, even today, by one important economic variable, GNP per capita.<sup>23</sup> The "conventional wisdom" among the experts on development and official agencies, national as well as international, has been, and still is, that development takes place through economic growth. Economic growth has therefore remained a major priority with all development agencies as also with the USAID. The basic argument is that economic growth provides the necessary resources to tackle all other problems due to lack of development. For example, a high growth rate of GNP per capita provides resources for

mitigating the poverty in poor countries and lack of resource base in resource poor countries like Japan. As Wichterman has pointed out, "Earlier "conventional wisdom" among donors on how best to achieve development through economic growth often failed to include what are now considered by many to be critical components of sustainable development: 1. equity, 2. the environment and natural resource base, and 3. financial self sufficiency."<sup>24</sup> This is now being recognized. "Economic growth per se, measured crudely in terms of expanding gross domestic product, is not in itself sufficient for sustainable development and reduction of poverty."<sup>25</sup> Economic growth that USAID document seeks is rapid, broad-based, sustainable, environmentally sound and participatory. There are three areas of concentration: (i) strengthening markets, (ii) investing in people, and (iii) enhancing opportunity and access.

The population problem is both national and international. The world population has been growing at a rather fast rate and some scholars wonder if there are enough world resources to support such a large population in the future; pointing out once again to the specter of the Malthusian dilemma.<sup>26</sup> This problem is specially serious in the developing countries both because of high rate of population growth and higher density of poor population. This high density and high growth rate reduces the effectiveness of any development program, forces pressures on environment, and makes the objective of poverty reduction more difficult. Worse still, it leads to malnutrition and through malnutrition sets up the vicious cycle of poverty. The health conditions in the poor countries are inadequate. Large increases in population make it worse. Not only is good health a necessary condition for a person's well being, it is an important factor for economic growth. It increases worker productivity both because of (i) intensity of work effort and (ii) avoidance of production loss due to illness leave. It frees resources that would otherwise be used to provide health services to the people with disease. It also promotes children's investment in education and skills; an investment which is now being recognized as important for future economic growth. There is a growing recognition about the seriousness of both health and population. The World Bank devoted its 1993 Development Report to analyze, and emphasize, the issue of health.<sup>27</sup> USAID has also defined population, health and nutrition as a priority area. As Esselman suggests,

"USAID's understanding of the sustainability of its efforts in the health sector has evolved considerably over the last five to six years with important lessons learned."<sup>28</sup> USAID places a great deal of emphasis on stabilization of world population since it considers it as one of the major threats. "USAID's Strategies for Sustainable Development defines our long - term strategic goal in this sector as contributing to a cooperative global effort to stabilize world population growth. The anticipated near - term results of our efforts over the next decade are: a substantial improvement of women's reproductive health, especially unmet need for contraception; a reduction of child mortality rates by one third; a reduction of maternal mortality rates by one half; and a decrease in the rate of new HIV infections by 15 percent. If successful these efforts are expected to result in a total world population of less than 9 billion by the year 2025, and enable and enhance sustainable human and economic development."<sup>29</sup>

Democracy has been one of the major American values shared by people all around the world. Yet democracy, and democratic institutions, have not been considered important factors for development. Since development has been defined in economic terms alone there was little place for such principles as democracy unless one could argue that democracy is useful for economic growth. McHugh points out that, "Before 1993, USAID and other donors believed that democracy's most important contribution to development was its contribution to economic development."<sup>30</sup> However, the relationship between democracy and economic growth is complex and tenuous. One can find cogent arguments as well as empirical evidence both in favor and against the contribution of democracy to economic development.<sup>31</sup> The argument for democracy has to be developed on its own merits and not through the medium of economic growth. Democratization is a priority area because without it peace is impossible. Without peace there is no economic security and development. Recently, however, USAID has identified democracy as a priority area in its own right. One can reason that this emphasis arises from USAID's concern with *participation* as an important mandate of SD. The development process is expected to 'involve, respond to, and be accountable to the people who will live with its results. This in a sense is a definition of a democratic principle and institution. Democracy promotion establishes the following four priorities:

1. "meaningful political competition at the national and local levels;" 2. " Respect for the rule of law and fundamental human rights;" 3. " Effective, transparent and accountable governance structures; and" 4. " Popular participation in decision making by all sectors of civil society."<sup>32</sup>

We have discussed both the idea that SD is a macro concept and some of the issues in the four priority area as articulated by official USAID documents. We now get back to the question posed earlier; how do these priority areas relate to the concept of SD described in the *Strategies 94* document? We pursue this question in the following sections.

#### **INTEGRATION OF PRIORITY AREAS:**

The question, how do priority areas relate to SD as described in the *Strategy 94* document? leads to a number of other questions. Does SD involve each of these priority areas as a particular subset? If there are interrelations between different areas, how do these interrelations effect the relationship of the priority area with SD? Are activities in these areas that have been carried on in the past relevant to the process of SD? In case the projects, and policies, in these areas were sound and resulted into genuine development, would it not be a part of SD? Before we can respond to these questions, there is a prior question: Are these priority areas independent of each other or are they interrelated? If they are interrelated, can these be integrated?

Even though the idea of a priority area gives the impression that each priority area is a specialized field in itself, it should be clear that all these priority areas are highly interrelated. It could not be any other way. The idea of a priority area is basically a matter of emphasis. For example, dealing with environment problems automatically leads to population and health policies which in turn requires democracy and economic growth. In fact the interrelationship between economic growth and environment is now well recognized. As the spokesperson for the World Bank states, "Rio was a signal to the world that after decades of pitting environment quality against economic growth, policy makers are finally becoming aware of the crucial and potentially positive links between the two. Humanity must learn to live within the limitations of the physical environment as both a provider of inputs and a "sink" for waste."<sup>33</sup> USAID also states similarly. "At the

United Nations Conference on Environment and Development (UNCED), both rich and poor nations agreed that economic growth and environmental stewardship must both be pursued to avoid catastrophic overload of the Earth's carrying capacity in the next century."<sup>34</sup> Economic growth, meeting environment threats, stabilizing exploding populations are not possible without people participation. People participation, a concept emphasized in the USAID policy perspective, requires empowerment which presupposes a democratic framework. Even though a particular policy or project may originate, and emphasize, a particular priority area, the interrelationship implied in the development process ensure that all other areas are also affected. Many a times, these indirect effects may be more important than the direct effect in the desired priority area.

If these interrelations are strong and important, then it follows that there is a need to integrate these priority areas. The *Strategy 94 document* recognizes this need for integration and has articulated it in the form of a method and approach. "The fundamental building block of USAID's programs will be integrated country strategies. These strategies will take into account the totality of development problems confronting the society.... We intend to minimize so-called "stove pipe" projects and programs that operate without regard for other development efforts and larger objectives."<sup>35</sup> [Integration of these priority areas then adds a new dimension particularly in view of the way USAID plans to measure success" by the impact it has upon the lives of the women and men it is designed to assist."<sup>36</sup> After all the reality of human life and society is complex and whole. It can be approached from different sides but in the end affects the whole. If one has to judge the results at the level of the whole, then every approach, from whichever side, has to take into consideration the total effects. Integration of these priority areas, both at the project design and implementation level become crucial.

Integration of these priority areas is not merely a matter of adding them up. The integrative process sets up a "virtuous cycle" so that what comes out is a "different whole" which is greater than the sum of the parts; both in terms of quantity and quality. For example, genuine policies that promote and improve health of people, young and old, and encourage them to actively participate in democratic processes improve the quality of the physical environment as well as make workers more productive so that there is a greater

well being all around.

Having settled the issue about the interrelationships between the priority areas, we proceed, in the next section, to the question of the relationship between the priority areas and SD in terms of the *Strategy 94* document. In other words we offer a working definition of SD.

### **TOWARDS A WORKING DEFINITION OF SD:**

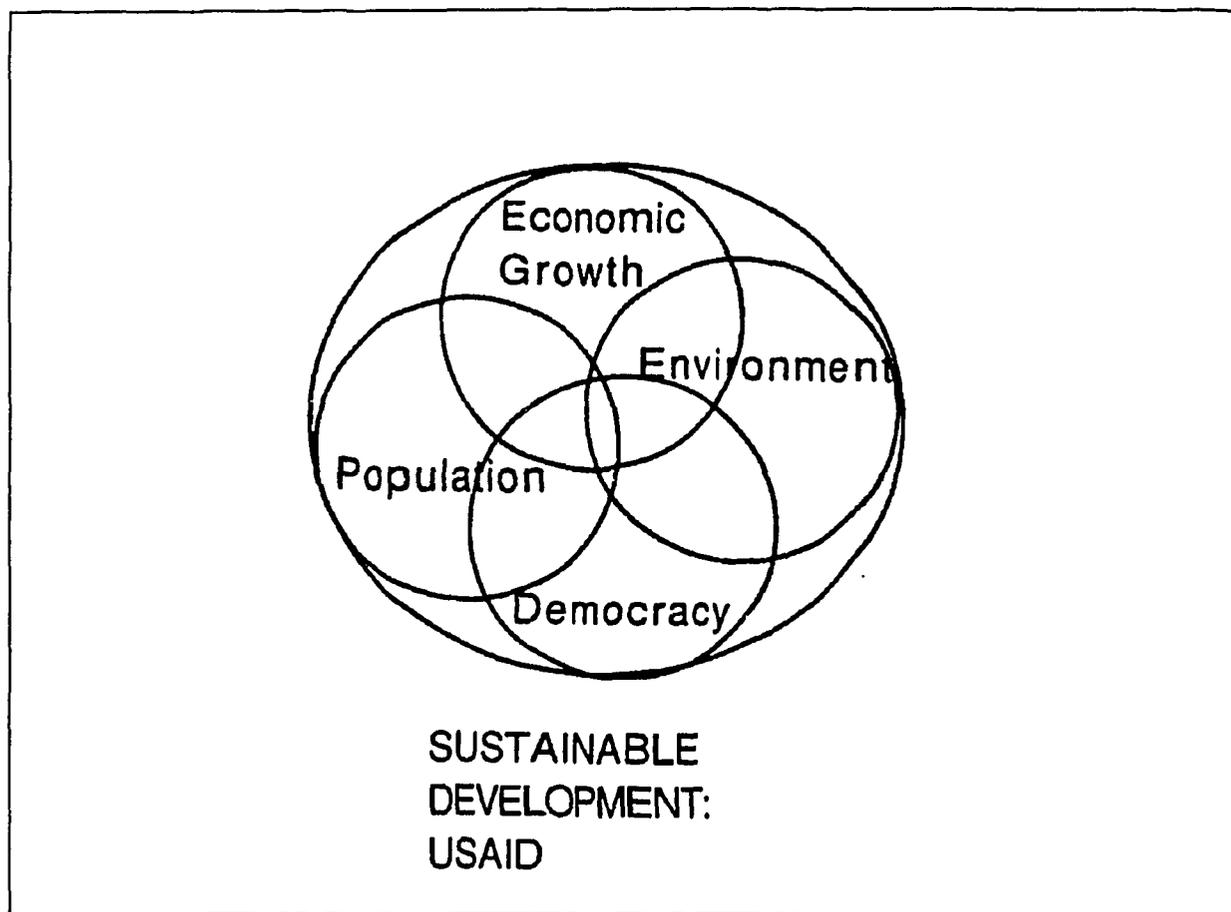
As we have argued, SD approaches the development process as a whole. No area is excluded. Any approach, however, has to be from one or the other side. Furthermore, resources are limited and have to be used as efficiently as possible. Priority areas provide a mechanism to obtain maximum returns from limited resources. The objective of the priority approach is to leave the economy and society, as a whole, better off. Here a simile from medical practice may be helpful. The doctor operates on the most affected part of the body but the object is to make the whole body healthier. If the medical treatment leaves one part well off but the whole body weaker and unhealthy, the treatment is not a success. Similarly, the priority areas are a means through which the process of SD is promoted.

This suggests a working definition of SD in the USAID context.<sup>37</sup> In fact it is implied deep in the USAID policy statements; as pointed out above. SD in terms of USAID activity and approach involves the integration of the projects and policies in the four priority areas. Integration is at every stage: design of the project, its implementation and evaluation. Thus when a project or policy is designed in any area, the design will seek its impacts on, and relations with, other priority areas and how does it effect the whole economy and society. Similarly at the implementation stage, efforts at integration involve in recognizing the effects in other priority areas and through these on the economy and society. Evaluation too is an attempt not only to seek how successful the policy and project has been but also to learn lessons about how to better integrate future projects and policies. The underlying theme is integration of the priority areas into SD.

Figure 1 below gives a schematic view of this integration. It is a stylized way of looking at it and should be viewed as such. What it suggests is that these four areas

intersect. Their union is not an empty set. Furthermore, the large circle, of which these four are a part, is greater than the sum of its part implying that SD adds more to development.

Figure 1: A REPRESENTATION OF SD AS AN INTEGRATIVE ACTIVITY



The working definition of SD in USAID policy and project recognizes that SD is a macro idea. The integration of the priority areas, in fact, creates a whole which is greater than the sum of its parts; it is greater because the process of integration provides positive feedback effects. Thus there are areas in the SD circle that are not part of the circles defined by priority areas. These areas represent the fact that individually, and jointly, all the four priority areas do not, and can not, reach the whole society and economy; such as the informal sector, self sufficient village type societies, non market entities that can

not be reached by the market type activities, etc. In this sense it is able to resolve some of the macro - micro tension. If we look into the substance of this working definition we find that it involves everything stated about SD in the *Strategy 94* document. In other words, this definition is fully consistent with that of Strategy 94 document. The difference is that this working definition is analytical and is based on the work already being done in USAID while the one in Strategy 94 document is descriptive and speaks only to the principles involved from which the various USAID activities are defined and implied.

Not only have we framed an analytical working definition of SD in the context of USAID, we have also, in the process, set up a principle for formulating a working definition of SD for other agencies. The principle lies in developing integration of the various activities; assuming of course that such an integration will eventually lead to SD. Having drawn up a framework, it is instructive to look at similarly formulated working definition for other donor type agencies involved in development. We have access to World Bank pronouncements. We look at the World Bank in the next section and compare it with USAID; this comparison provides greater insight in the working definition of SD for USAID.

#### **WORLD BANK SD CONCEPT AND A COMPARISON:**

Like many other development and donor agencies, World Bank talks about SD but has no official definition. World Bank literature, specially in recent years, is replete with the term SD. Pezzy(1992) has written a whole paper on this concept and in his appendix on the definition of SD concept he lists at two separate places the description of SD in World Bank official documents. To quote:

“1. “... satisfy the multiple criteria of sustainable growth, poverty, and sound environmental management” (1987, p 10)

2. “To a large degree, environmental management should be seen as a means of attaining the wider objectives of sustained economic growth and poverty alleviation” (1987, p. 18)

3. “... elevating concern about environmental matters ... and developing the capacity to implement sound practices for environmental management ... are [both]

needed to reconcile, and, where appropriate, make tradeoffs among the objectives of growth, poverty alleviation and sound environmental management" (1987, p. 28) ....

4. " Promoting growth, alleviating poverty, and protecting the environment are mutually supportive objectives in the long run .... In the short run, however, the objectives are not always compatible" (1987, p5)

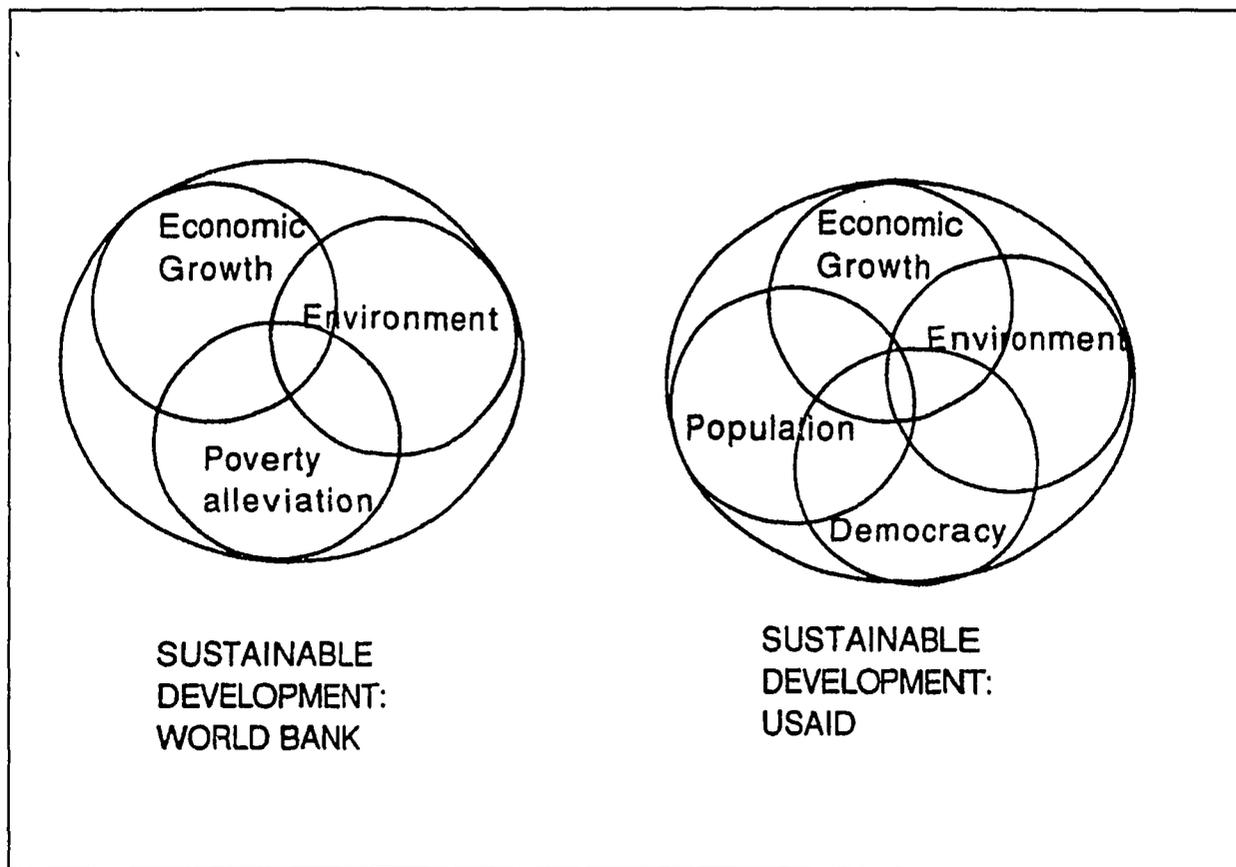
5. "Poverty - of people and of countries - is thus a major cause of environmental degradation. That makes it essential, if environmental degradation is not to become completely unmanageable, to devise policies towards economic growth, with special emphasis on improving the incomes of the poor.... Nevertheless economic growth may also destroy the environment and further jeopardize the already tenuous lives of the poor.... Thus, although growth is imperative for alleviating poverty, it may also adversely affect the poor and the environment if inadequate attention is paid to the poor and their needs" (1987, pp 6-7)

6. " ... economic growth, the alleviation of poverty, and sound environmental management are in many cases mutually consistent objectives. (1988, p 1)" <sup>38</sup>

More recently, World Bank thinking on SD has been articulated in the December 1993 issue of *Finance and Development*. It still does not define SD but points out that three viewpoints are important; namely that of (i) economists, (ii) ecologists, and (iii) sociologists. Sociologists point of view, however, is still new to World Bank ideology. The World Bank concept of SD is based basically on the economists idea of economic growth. However, there is now a serious recognition that economic growth has not been able to deal with two important externalities: (i) reduction of poverty, and (ii) environment. World Bank official thinking on SD lags behind the US, specially in the area of "environment" where the US Vice President Al Gore is, personally, on the forefront of knowledge World Bank thinking, and projects, reflect the extension of the idea of economic growth so as to take into consideration these two externalities as confirmed by the quotes above. Though it does not offer an explicit definition of SD, the policies it follows helps us to develop, by the method we have outlined above, a working definition of World Bank's idea of SD; namely, an integration of polices with three objectives: economic growth, poverty alleviation, and environment management.

Figure 2 follows from the methodology of formulating a working definition for USAID and World Bank based on the principle of integrating what the agency considers its priority areas or main objectives. It provides a comparison between the USAID and World Bank working definitions of SD. Once again it needs be pointed out that these are stylized forms so that one should not read too much in these. Still this schematic approach does point out an useful distinction; namely, that the World Bank approach misses a larger part because it is, so far, based on purely economic concerns and their extension to two major externalities. World Bank is aware of this weakness as pointed out by Cernea.<sup>39</sup> USAID, by adding the dimension of democracy is able to cover larger ground.

Figure 2: USAID AND WORLD BANK CONCEPT OF SD: A COMPARATIVE LOOK



For purposes of comparison, World Bank SD concept is an integration of three areas compared to the USAID's four priority areas. There is a good deal of overlap

between these two concepts. Both involve integration of multidimensional objectives. World Bank objectives and USAID priority areas do not stand individually by themselves; they are highly interrelated. The totality of these interrelations are common to both even though individual interrelations may be different. Economic growth and environment management are common to both though the way economic growth and environment management are defined may differ in practice. World Bank's poverty alleviation may, on the surface, seem different from USAID's priorities about democracy and population stabilization. If one goes somewhat deeper in these areas, one finds a number of similarities. Still, the USAID priority areas cover greater area partly because World Bank is limited by its charter and partly because it is too much market determined missing a large chunk of what is known as the informal sector where standard market rules do not apply. In a sense USAID may have comparatively greater freedom of action.

It will be interesting to compare similarly implied SD concepts for other donor agencies in different government and multigovernment institutions.

### **3. SUSTAINABILITY OF BENEFITS (SB):**

**SB: Some Basic Ideas**

**Project sustainability: Concerns and a definition:**

**SB : Assessment and guidance**

**SB : A micro concept**

#### **SB: SOME BASIC IDEAS**

Development is a long and continuous work that depends, essentially, on the involvement of the people. The process moves from one successful project to other successful projects. USAID's development work has involved delivery of services and benefits to the people through projects that it either implements or supports. Like many other donor agencies, it has been concerned with the notion that the projects it undertakes, and policies it promotes, should have lasting effects. This is an old concern which has been accentuated by the decline in the availability of funds. There has therefore been greater need to use these funds more efficiently in terms of achieving the desired objective of the continuance of benefit streams. The idea that the project should

have the capacity to deliver its intended benefits over a long period of time has become known, in some circles, especially at IMDC, as "Benefit Sustainability"; SB for short. There is now a good deal of literature on it. Before reviewing this literature, it may be useful to look into some of the basic issues that sustainability implies so that the literature can be placed in proper context. SB is based on a major assumption which implies a number of related questions.

In development literature, it is assumed, axiomatically, that a development project implemented, and supported, by the donor agencies provides benefits to some people. Benefit means "something that promotes well being." Those people whose well being is promoted are known as beneficiaries. It follows that a development project has two elements: (i) provision or delivery of a product/service that promotes well being, and (ii) the existence of beneficiaries; i.e. there are a large number of beneficiaries who find this product/service beneficial. This assumption raises a number of questions. Could a development project, in its process of promoting well being of some beneficiaries may also affect negatively on the well being of some other persons? Some scholars argue that just as there are beneficiaries, there are also victims.<sup>40</sup> In economic literature this is analyzed through costs and benefits. Since the beneficiaries are different from the victims, the comparison of costs and benefits becomes difficult; it essentially depends upon the people who evaluate these costs and benefits.<sup>41</sup>

Our interest here is in SB where the existence of benefits is assumed. There are, however, a number of relevant questions: Who are these beneficiaries? Why and how do they value these products/services? Are these benefits needed in the long run? Can these benefits be produced in the long run?

The development literature on SB has assumed that there is always a group of beneficiaries who value the product/service in the form of a need. The beneficiaries are the people in need of this service. The underlying assumption is that there are a very large number of these needy people who are defined as poor; the number of the poor in the developing world runs into hundreds of millions.<sup>42</sup> Since these people will be there even in the long run, these products/services will also be needed in the foreseeable future. Without these assumptions, sustainability is not a relevant issue.

The production of benefits requires some type of a physical and institutional infrastructure. Such an infrastructure costs money so that there has to be the availability of financial resources in the long run. At the initial stage, donors provide financial resources through project design and implementation. Once the donor agency is out, the physical plant has to be maintained, the wages and salaries of the employees have to be paid so that there is a need for a continuing revenue stream to provide the necessary financial resources. In the private market, this is taken care of by sales of the products. For the private markets to operate, these needs have to be transferred into demands; to use the economic lexicon. The question then becomes, how can these needs be transformed into demands? That is where the objective of "improving market efficiency and performance" gains importance. For the market to be operative, however, it is necessary that the beneficiaries must have incomes so as to generate enough demand for the suppliers to be willing to produce the desired product/service benefit. Once market is operative, the system becomes sustainable and there is no need for the donors and other development agents to intervene.

Many a times the beneficiaries lack incomes to generate enough demand. In this situation market can not be established. The project need to be long enough to create a steady employment and income flow to the beneficiaries so that they can generate enough demand to promote the development of the market. On the other hand, if the project is biased to generate incomes to people who already have incomes from other sources, it may end up changing their taste patterns such that they may consider the benefits produced as inferior goods. There will once again be little market demand for these products. A similar situation arises if changes in resources base, social dynamics, and technical change make these products/services obsolete or irrelevant and change taste patterns much before the establishment of the market. In these situations market solutions may not be viable

If the market solutions are not viable, there has to be financial, and other type of support from sources other than the donor agencies. Here, the commitment of the host country and beneficiaries become important. Such commitment follows only from full participation, both in substance and perception. This explains the emphasis on

participation in current thinking of the donor agencies. Participation involves shared visions and decisions as well as working together as a team so that once the donor agency leaves the scene, the other teams members are in place and take up the project and the benefits continue to be produced in the long run. This involves both political relations and managerial capacities.

The literature on SB, especially from IDMC, deals with many of these issues. It starts from the given of the desirability of projects and policies to provide benefits and looks at the methods and techniques that promote the sustainability of benefits. It is this literature that we review in the next two sections.

### **PROJECT SUSTAINABILITY: CONCERNS AND A DEFINITION:**

Once a concern about SB is articulated, a question arises: how have the projects funded and implemented by USAID fared in terms of their sustainability? It is not easy to develop an index for SB. Also, many projects in the past did not have SB as its main objective. To evaluate these by SB criteria after the fact may sound unfair. A researcher has to take into consideration such factors in analyzing the projects from the point of view of SB. Gustafson (1992) did an extensive review of sustainability literature and found that only a small proportion of donor projects provide lasting benefits streams. In fact too many projects focus on short term implementation. He refers to a number of evaluation reports. For example, "A 1988 A.I.D. study (Kean, Allen, et al 1988) of 212 evaluation reports from FY 1985 and FY 1986 used a broader definition of sustainability and reported even more alarming results. Twenty six percent of the projects earned strongly negative ratings, 56 percent got marginal marks and a mere 11 percent of the projects were considered to have strong prospects for being sustained after the termination of U.S. assistance."<sup>43</sup> His over all conclusion is that no simple formula exists for calculating a "sustainability index" and most studies point to the fact that concern for SB of USAID projects remains inadequately addressed and sustainability problematic. Other donor and development agencies also come to similar conclusions.<sup>44</sup> Bamberger and Cheema (1990) analyzed sustainability of World Bank supported projects and came to a similar conclusion. "The OED Annual Review of Evaluation results for 1988 (OED, 1990)

included an analysis of sustainability of 557 projects audited during the period 1986 -88. The assessment, covering projects in all major economic sectors, was made at the time of project completion and classified the likelihood of projects being sustained into the following categories: " Likely," "Unlikely," "Marginal," and "Uncertain." The report emphasizes that the assessment was made at the time of project completion, rather than at a later point after the project has been operating for a number of years. When all regions and sectors are combined, 52 percent of the projects were classified as likely to be sustained, 15 percent as unlikely, and 33 percent as marginal or uncertain."<sup>45</sup> It is doubtful if these conclusions have changed in the past four five years.<sup>46</sup>

Once it is recognized that SB is an important objective and the projects are not achieving this objective, a number of questions arise. What needs to be done to ensure SB of the projects? Before one can develop policy guidance, it is first necessary to define the SB concept. The International Development Management Center, IDMC, at the University of Maryland, College Park, has done extensive research on SB over the last 7 - 8 years. Brinkerhoff and Goldsmith (1990) distinguishes between the project sustainability concepts as looked from the points of view of (i) agriculturists and natural scientists, (ii) economists, and (iii) management experts. Accordingly, sustainability is perceived in terms of the capacity of the project to (a) ensure continuity of benefit stream in terms of agricultural production while saving the ecology of the place<sup>47</sup> (b) ensure that " the price is right"<sup>48</sup> so that the project can become a part of the market and thereby gain self financing, and (c) analyze the organizations and develop institutions that can last to provide the necessary products/services.<sup>49</sup> Even though each of these three groups consider their own perception paramount and the remaining two less relevant, in reality all three are highly related. Since all these are interrelated, these individual sustainabilities need to be, and have been, collapsed into a more comprehensive SB concept which, " is the ability of a system to produce outputs that are sufficiently well valued so that enough inputs are provided to continue production."<sup>50</sup> White (1987) puts it more precisely as "the ongoing, dynamic process of continuing the valued results of development activities"<sup>51</sup> ; "valued results" translate into 'benefits.'. This provides a meaningful definition of SB.

Having defined the SB concept, the next question is what are the key factors that leads a project to SB? White (1987) has identifies three important factors for successful BS; namely, (i) policy Incentives to reinforce long term results, (ii) institutions to mobilize continuing support, and (iii) management systems to set priorities and adapt activities.<sup>52</sup> Policy incentives are those that encourage economic growth, proper distribution of benefits of development to broader segments of the population, and those that preserve and enhance natural environment. These are the policies that provide the context within which projects and other development activities at the micro level are able to produce the desired benefits in the long run. The policy concept here is broad, involving both the capacity of the government to address long terms interests and incentives to help change behavior patterns. These involve policies in broad areas, such as macroeconomic policy, social policy and ecological policy. Social policy deals with issue of equity, distribution and other social dimensions of development.

Institutions are the necessary ingredients for the development activities to be successful. In this context, these are not the rules of the game<sup>53</sup> but instead mechanisms that encourage the host countries to participate and exercise responsibility for development efforts, that provide a collaborative process where the local units and/or private sector takes the responsibility to produce and distribute the benefits. These have been described as the "structure of incentives."<sup>54</sup> The emphasis here is to develop "institutional ownership" so that the participants can assume responsibility and take advantage of traditional organizations that capture social energy and assigns responsibilities to beneficiaries thereby increasing their local capacity and linkages.

The management systems are necessary because they enable managers to balance short and long term perspectives, to adapt the system to changing circumstances, and allow them to develop meaningful procedures so that work proceeds smoothly. All development work involves various types of constraints and need balancing; between short and long term, between responsiveness and strategic thinking, and between lean and mean management systems. There are many conflicts in balancing these areas so that these pose serious operational problems that can overwhelm the managers. The complexity that these different, and sometime conflicting, objective pose

adds greatly to the need of effective management systems and make them necessary for SB.

Given a definition of SB and some understanding of the key factors, we look at the issues of assessment and suggestions for guidance to project staff in the next section.

### **SB: ASSESSMENT AND GUIDANCE**

The next questions that need attention are: how to assess SB of projects? what suggestions can be offered to promote SB? A number of studies deal with the various aspects of the assessment question. Brinkerhoff (1991) tackles the question about assessment.<sup>55</sup> Assessment consists of a set of analyses that concentrate upon links among project performance, capacity for future performance and the project environment with a focus on the continuation of benefits. The assessment can be conducted at various levels of comprehensiveness, depth and formality. There are two types of analyses: (i) specification of project's expected long term benefits, and (ii) an understanding of both the direct and indirect influences of the external environment within which a project operates. The study raises three questions in connection with the influence of the external environment, namely, what has the environment to offer, how can it be obtained and who controls it. It suggests eight steps to deal with these questions. Adoum and Ingle (1991) offer a framework, Logical Framework, Logframe for short, as a planning tool for project design, implementation and evaluation. Logframe is used to pinpoint benchmarks and project impact targets. It defines a critical path that ensures SB and thereby the success of the project. The various elements in the Logframe need to be articulated as early and as well as possible. These are: goals or objectives, assumptions, purpose and purpose indicators, output and output indicators, and a list of activities. These elements are formulated in three dimensions defined by the three factors, (i) capacity development for resource mobilization, (ii) demand responsiveness for market driven outputs, and (iii) strategic operations for effective and efficient management. Goldsmith (1988) analyses the factors for assessing institutional sustainability.<sup>56</sup> The study is based on two sets of institutions: (i) colleges and universities engaged in agricultural science, and (ii) public agencies responsible for integrated rural development. Institutions are distinguished between rule and role oriented; USAID has focused on the latter. Goldsmith (1990)

provides a framework for SCOPE that attempts to model the social and economic factors at a conceptual level. The framework reflects a set of theoretical propositions on institutional sustainability.

Goldsmith, Gustafson, Ingle and Adoum (1991) address the question regarding advice and develop guidance for enhancing SB.<sup>57</sup> The focus of this guidance is on sustaining the long term returns on investment in development efforts by involving the host country. The guidance is for project managers and management. There are two preconditions: (i) commitment by the host country in terms of policy framework that provides the desired external environment, and (ii) commitment by the beneficiaries through an incentive system that involves them in the development process at various stages of the project. The guidance is designed for the project officers at virtually all stages of the project's life. The emphasis is on the early stages of identification of the project, its design, implementation and evaluation. The guidance is provided for ten aspects of the projects: (i) Assessment of incentives to build commitment, (ii) strategic planning to enhance responsiveness, (iii) participation to build local support and ownership, (iv) policy dialogue, (v) appropriate technology, (vi) institutional development and reform, (vii) marketing, (viii) financial viability, (ix) targets for privatization, and (x) human resource development. It will be appreciated that these are guidelines only and the project administrators have to use a great deal of judgment to relate these to the particular project and situation.<sup>58</sup>

We have analyzed the assumptions underlying the SB concept and reviewed the studies done at IDMC to answer the questions about: what it is? what factors promote it? how to assess it? and what guidance can be provided? We look into one of the characteristic of the SB concept in the next section.

#### **SB : A MICRO CONCEPT:**

SB refers to the continued existence of a project over a long time frame. Individual projects may, and can, be large. In the scheme of things, these are small compared to a country or a region. Accordingly it operates within the framework of a larger entity. The principles, or rules, on which projects are designed, organized, implemented and maintained are different from the framework of region or country within which they

operate. It is thus a micro concept. It compares and contrasts with SD which is a macro concept. In economics micro concepts are concrete as compared with macro concepts which are statistical.<sup>59</sup> For example, the income of a person is real and concrete while per capita income is a statistical concept in the sense that one can not identify a particular person who has the per capita income. Similarly, price of a commodity or service is real and concrete while inflation or the index of wholesale prices is a statistical aggregate. SB, too has similarities to the micro concepts in economics. It relates to, and follows from, small areas of concrete project activity that affects real people and real communities.

However, for SB to be successful, it requires not only its internal infrastructure in terms of physical plant and localized institutions but also the larger policy and institutional framework in the country; even in the world. For example, if a project is able to produce, cost effectively, an export good but the international trade relations do not allow the export of this good, there is no SB even though the project is successful in its limited micro sense. SB, though dealing with the concrete project, can not be considered in isolation of the macro economic, political, natural and social environment. Some of the problems of SB have arisen from a lack of supportive macro environment. On the other hand, the macro aggregate, being an aggregate depends essentially on the behavior of its micro elements. As we have argued, SD is a macro concept and is, thus, related to SB. It is this linkage between SD and SB that we examine in the following section.

#### **4. LINKAGE BETWEEN SD AND SB: AN ANALYTICAL FRAMEWORK**

##### **SD function**

##### **SD Function and USAID'S Four Priority Areas**

##### **SB function**

##### **SB Function and USAID'S Four Priority Areas**

##### **Linking SD and SB.**

#### **SD FUNCTION:**

SD is a process, an end result and a state of being. As an end result it is an outcome of a process which compounds a number of factors into a whole. SD is a

systemization of a rather complex reality. One can look at this reality from many different points of view. Because it is a system, one can identify different forms and types of these systems depending upon the objectives and principles involved. One such systematic look makes SD a function of a number of elements. In this sense it is a function formally similar to utility, production and cost functions in economics. In the literature on SD, a number of elements have been identified as important. These follow from ecologist's, economist's, and sociologist's approaches to SD.<sup>60</sup> We find that there are four important elements: namely, (i) community, (ii) environment integrity of the unit, (iii) macroeconomic policy framework, and (iv) sociological issues in development, such as equity, reduction of poverty, improvements in opportunities for women and children. Virtually all literature on SD refers to these four elements in one form or another. It is tempting to systematize the relationship between SD and the four elements considered as most important. We suggest the following formal relationship:<sup>61</sup>

$$SD = F \{ \int SB, Ec, En, M \} \quad (1)$$

where  $\int SB$ , Ec, En and M refer, respectively, to (i) sustainability of benefits, (ii) economic capital and macroeconomic policy framework, (iii) resource capital and environment integrity, and (iv) social capital and a multidimensional approach to development that takes into consideration social, political and other dimensions. SB stands for both the process and the resulting community of the beneficiaries of the development projects. These are the people with commitment who promote policies and processes that ensure SD. Since SB is a micro concept and SD a macro one, we have used  $\int SB$  (the integral of SB) in order to express SB in macro units. It needs to be pointed out that  $\int SB$  is the sum of all the project that ensure SB; these projects are run mostly by the host country; the donor agencies contribute, fund and help only a part of such projects. Ec and En are somewhat obvious since these have become the focus in most of the discussions. M provides both a necessary social capital and the end result which leads to SD. The social capital is reflected in terms of social institutions.<sup>62</sup>

The functional relationship is such that all these four individually are necessary but not sufficient conditions for SD. They are necessary by definition because non necessary elements, which are quite large, have not been included in the function. They are also

necessary because without these no SD is possible. Let us take these individually. Most, if not all, development takes place project by project and community by community. All the literature on SB that we have reviewed above suggests that development takes place only when projects satisfy the SB condition.<sup>63</sup> Again, development is not possible without economic growth. No doubt there is a distinction between development and economic growth so that there is not necessarily a one to one correspondence between the *rates* of development and economic growth. However, that the two are positively related is well recognized. Economic growth is not possible without capital and a supportive macroeconomic framework.<sup>64</sup> As regards environmental capital, it is now fully recognized that it is necessary for any development. The debate is now moving toward the next stage of how to incorporate environment concerns into measures of economic well being.<sup>65</sup> Similarly the need for M, the social capital and multidimensional approach to development is also a necessary condition.<sup>66</sup>

Though all these four factors are necessary for SD, none of these is sufficient. Thus the fact that most of the projects succeed in providing benefit sustainability will not, by itself, ensure SD. A successful macroeconomic policy framework is necessary but by itself does not lead to SD. We are familiar with a large number of poor countries and pristine natural environments that do not create development. The necessity for the multidimensional approach reflects the movement in recent years towards defining development as more than an increase in per capita income but it can not by itself ensure SD.

One advantage of writing SD in this form is to bring out the complementarities, tensions and trade offs between various elements of such development. The tension, and some of the complementarities, between macroeconomic framework for growth and *environment resource policy is now well recognized*<sup>67</sup>. There are similar conflicts and complementarities among other elements as well. A full working out of these connections and conflicts will take us too far. Our object here is to suggest the nature of this relationship and point out some of the implications of such a relationship.

## SD FUNCTION AND USAID'S FOUR PRIORITY AREAS

A question arises: how does this function (1) relate to the earlier definition of SD in the context of USAID as integration of four priority areas? SD as integration of four priority areas provides one side of the coin articulating how the existing working of USAID can be goaded into SD. SD as a functional form in (1) reflects an analytical framework whereby policies for SD as well as for integration of four areas can be formulated, analyzed and evaluated. The three elements, Ec, En and M may also be considered as important factors that help integrate the four priority areas and provide the necessary framework within which projects and policies for SB within priority areas can be accomplished. Since both sides deal with the same phenomenon of SD; they are quite related. We have already commented that all the four areas are interrelated with each other so that activities in one area impact those in other areas. To understand how these priority areas relate to the different elements in the SD function (1) let us take these one by one. We will look at interrelationships with the three elements, Ec, En, and M and will deal with SB in the next section.

(i) Economic growth requires the use of all three types of capital; natural including human, social and physical, In return it provides resources for improvement in all these capitals. Economic growth, therefore, interacts with Ec, En and M.

(ii) Environment involves both agricultural and natural assets. Agricultural production has the same effect as economic growth since it is a part of it. Environment, both its deterioration and improvement, effects directly the natural resource capital, En, as well as social capital M, because for example, a degraded environment affects different sections of the society differently thereby making problems of equity and distribution more acute. It also affects Ec because a reduction in natural capital places severe constraints on the process of economic growth by diverting economic resources and changing trade off values.<sup>68</sup>

(iii) Population, health and nutrition effects the human resource and capital directly. Good health and nutrition provides human energy, and with education skills, for the economic production process. It thus has a direct bearing on Ec. Similarly, large increases in population, particularly, among poor sections of the society, pose a threat

to the environment capital thus effecting En. Poor health and nutrition and large populations also directly affect the social capital M in a variety of ways.

(iv) Democracy has a direct bearing on the social capital M because it affects the efficiency and effectiveness of institutions. It is generally assumed that democracy is positively related with economic growth and improvements in the physical capital, Ec, though empirically it seems that this relationship may be weak. Democratic institutions do have a positive impact on the maintenance of the environment type capital, En.

We now turn to SB which is characteristically different from the three elements as well as its relationship with the four USAID priority areas.

### **SB FUNCTION**

Characteristically SB is similar to SD. The major difference between the two is that SB is expressed in comparatively micro units while SD in macro units. Like SD, SB is also a process, an end result and a state of being. It too is an outcome of a process which compounds a number of factors into a whole, a systemization of a complex reality defined by a project and the functioning of a community. Because it is a system and an end result of a process, SB can also be considered a function of a number of elements. In the literature reviewed above, a number of elements have been identified as important. These are: (i) economic resources in the form of financial streams, (ii) productive local resource base such as fertile land for agriculture, (iii) social institutions more in the form of organizations than rules of the game, and (iv) participation by the beneficiaries. Like SD, SB can also be formulated in a functional form; namely,

$$SB = F \{ ec., en., m, P \} \quad (2)$$

Where ec, en, m and P stand, respectively, for economic or financial capital, resource base or natural capital, social cum institutional capital, and beneficiary participation. (2) is akin to (1) in the sense that individual elements provide necessary but not sufficient conditions for the existence of the functional relationship.

The elements of SB function (2) are quite similar to that of the SD function (1) except that the elements of SB function are expressed in micro units. The expression in terms of micro units affects the properties of these elements. Thus instead of physical capital necessary for SD function, the relevant concept is financial capital for a project.

For a country financial capital has little meaning while for the micro projects, given financial capital, and functioning markets, it can be easily converted into physical capital. The emphasis in SB of the projects is therefore on financial sustainability because without it the necessary physical capital can not be obtained, and/or maintained, with the result that the necessary services/outputs can not be produced. The financial capital, ec., is thus necessary for SB. Similarly, resource base and natural capital at the local level is also necessary for the production of the desired services/outputs; i.e., en, is also necessary. A number of studies reviewed above have commented on the necessity of institutional sustainability; i.e., m, for SB. We have picked up "participation," P, as a special element partly because every study had suggested or implied its importance and partly because it is being emphasized by all donor agencies; USAID in the form of empowerment.<sup>69</sup> and World Bank in terms of participation.<sup>70</sup>

#### **SB FUNCTION AND USAID'S FOUR PRIORITY AREAS**

We come to the question raised in the section above about the relationship between SB and USAID's four priority areas. In fact SB reflects the pursuit of projects and policies in the individual priority areas. It thereby takes into consideration all the four priority areas. Since SB is a function of the four elements, as suggested in function (2), the relationship between SB and USAID's four priority areas operates through these elements. Let us take these one by one.

(i) Economic growth takes place when good and services are produced. The objective of financial capital, ec., is to ensure the viability of the production of goods and services in the long run. Thus, ec., is directly related to economic growth. Economic growth also impacts on the other three elements. It involves the use of local natural capital, en., promotes and, is effected by, the nature of social and institutional capital, m. It also requires the participation, P., of people in various forms; such as entrepreneurship, human energy and skills. Economic growth has therefore a deep relationship with SB. In fact, one of the objectives of SB is development proper which involves economic growth.

(ii) Environment and natural resources define the natural capital without which production of services/outputs can not take place. Local natural capital and ecosystem, en., is a part of the environment and natural resource. Since it defines the limits to which

production can be pushed, it relates to other three elements as well. No project can be financially sustainable if the necessary local natural capital is not available; i.e. it is related to ec. Improvements and degradation in the environment have a sanguine impact on the social and institutional capital partly because it diverts resources in another direction and partly because it has a direct impact on the well being of the people in the area. It is, therefore, related with m. The relationship of the environment with P may not be obvious, yet it lies deep in the system. We hear, all over the world, that people at local level are joining together to combat or improve the local environment, even the global environment. Narmada *bacho andolan* in India<sup>71</sup>, Chiapas movement in Mexico<sup>72</sup>, The NIMBY<sup>73</sup> phenomena in the US, Green party in Germany are a few examples of the manifestation of this relationship; one can provide examples from virtually every part of the world.

(iii) Population, health and nutrition effects the social and institutional capital, m, directly by increasing or reducing the human energy and initiative flows. Since these human energies are an important part of the production of goods and services, it also affects the flow of financial capital, ec. Population pressures affect, negatively, the local natural capital, en; in fact reductions of these pressures on local environment is one of the major goals of all development. Lack of health and nutrition and crowded populations sap human initiatives and energy making people prone to authoritarianism discourages P, participation by people. Haiti and Somalia are examples of how the population, health and nutrition problems have a negative impact on P thereby making SB difficult if not impossible.

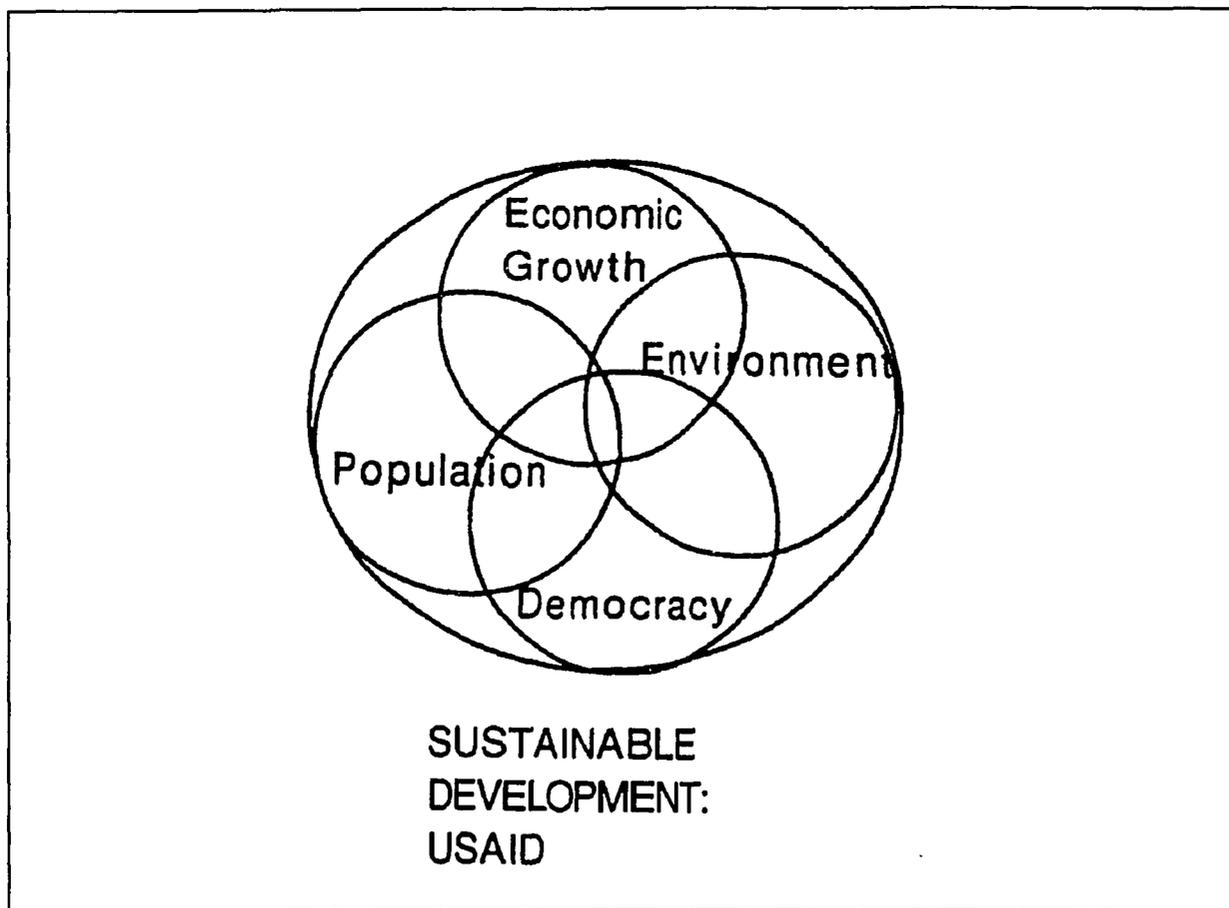
(iv) Democracy institutionalizes participation at all levels and thus relates to P. It has a direct relationship with institutional capital, m., because institutional sustainability depends upon participation which is encouraged by democratic principles. It has an impact on financial capital, ec., through the development of grass root movements. Once again the example of Narmda *bachao andolan* is instructive. It has been able to force the World Bank to withdraw from the financing of the Narmada dam project and the Government of Gujerat though still committed to the project is finding it difficult to raise the necessary finances.<sup>74</sup> It has an impact on the local physical capital, en., also through the grass root movements of the people.

We find that all the four USAID priority areas are related with SB and SD. SD and SB are also related in so far as we have defined the integral of SB an element in the SD function (1). We discuss the linkage between SB and SD further in the following section.

### **LINKING SB AND SD**

SB and SD have similar properties. SB is a micro concept and SD a macro one. They are both interrelated. Without an emphasis on macro framework consistent with SD, SB will not ensue. Similarly, without a successful SB, SD will not take place. We have identified a SB function (2) which is made up of a number of elements that relate to the USAID priority areas. We have also formulated a SD function (1) of which SB is an element. These two functions (1) and (2) together link all the elements with each other and further integrate the four priority areas. This is a complex system as it links a well sized number of micro and macro units. Figure 3 provides a schematic view of this complex linkage.

Figure 3: Linkages between SD and BS: A schematic representation



Large circles represent macro units. Since the SD function (2) has  $\{SB$  as an element, it has been represented by a series of small circles - in the figure above only two such circles are shown. Other micro units are expressed as rectangles; to distinguish these from the macro units. Though there are interrelationships among all of the units, figure 3 shows causality only in one direction, specially from the macro units to micro units, in order to emphasize important relations. Showing all the mutual interrelationships will make the figure messy and lose its advantage of highlighting certain relations. As one would expect from such drawing, figure 3 is formalistic. Its advantage lies in placing some of the linkage in clearer perspective. It is understandably complex. Once again, it needs be emphasized that the schematic arrangements should be looked only as a stylized representation.

In the real world of development, however, such formalism has little relevance.

Here the linking takes place through a multiplicity of forms and activities; e.g. partnership in the formulation of policy, participation in project design, team work in implementation, local ownership of institutions, assurances of financial and physical resources etc. Formalization highlights the issues on which projects and policies have to focus.

Having highlighted some of the issues that SD and SB focus on, we get back to the real world of USAID aided development projects and the lessons learnt from them. These cases and their lessons will, hopefully, validate the ideas presented above so that we can derive from these ideas policies for USAID that promote SD and SB. USAID has been in the development work for more than four decades so that there are a lot of USAID aided projects all over the world. All we can do is to look at a few such cases. Accordingly we study a four cases where USAID's aid has helped agricultural research in Latin America and Caribbean and the lessons learnt both from these cases as well as from health projects in four countries in Africa. This we do in the following section.

## **5. USAID SUPPORTED PROJECTS**

**Four cases**

**Lessons**

**Validating The Analytical Framework**

### **FOUR CASES**<sup>75</sup>

This section is based on a draft report entitled, "Programming for sustainability: Lessons Learned in Organizing and Financing Private Sector Agricultural Research in Latin America and the Caribbean" by Kerry J Byrnes and Susan L Coming for USAID Bureau for Latin America and the Caribbean. It is a summary report that provides the results but do not give details of the projects studied so that it is not possible to do a comprehensive analysis from the various dimensions articulated in earlier sections.

The Latin American and Caribbean study refers to four cases all dealing with agricultural research. From this study one can deduce the some elements of these four cases as follows:

(i) Colombian National Federation of Coffee Growers: The coffee growers participate in participating and approving research agenda through their representatives.

The research agenda includes coffee growing problems, as perceived both by the growers and researchers, and identifying diversification opportunities to develop the productive capacity of the coffee growing region. An unit within the Federation, namely, National Center of Investigation, is responsible for the research program. The research for diversification is contracted out to universities and other research organizations. The Center has successfully developed a coffee variety that is resistant to leaf rust disease thereby reducing cost to growers. The Center has followed a policy of releasing technologies only when these have been fully validated thereby gaining respectability among the users. The funding is sought from various funding agencies such as USAID, other international agencies, and national agencies like National Council of Science and Technology. Though it has no endowment or single funding source, it has been able to obtain revenues from growers through its involvement in programs that lend themselves to market demand. Its largest asset is its reputation among, and credibility with, the growers.

(ii) Chile Foundation: The foundation was not established as an agricultural research institution per se. Its research agenda is wide and includes: solving specific grower agronomic and/or post harvest problems, implementing quality control programs for Chilean producers, adaptive research for specific industries (e.g. berries, aqua culture), developing new products and determining global markets. Research priorities attempt to explore and identify areas in Chile with comparative advantage. Technological research promotes production in these areas. The research is carried on by organizations most suited for the task. The Foundation has developed facilities for research in agroindustry, agroprocessing, enology and viticulture, forest products, aquaculture and market information. The research is carried on both at the request of a client to solve a specific problem as well as at the behest of a researcher. The foundation has its own laboratory facilities and staff. The foundation disseminates research results when it is proven that these have practical application and it avoids duplication of effort. In the beginning the Foundation received a substantial grant from the Government of Chile. However, Foundation's activities are mostly self financing through the charging of user fees, joint ventures, and outside clients such as international agencies, Government and

private companies. It has acquired a reputation among industrial and private sector circles as being the premier source of for certain type of technology and related research.

(iii) Jamaica Agricultural Development Foundation: This foundation was set up with the mandate to "revive agricultural research in Jamaica and to assist in bringing agricultural productivity in the country to levels comparable to those of other Latin American and Caribbean countries" Accordingly, it supports agricultural research that improves efficiency and productivity by developing new methods and techniques. The Foundation identifies certain commodities as priorities that favor the resource poor farmers. The priorities were established in the following order: local/ethnic foods, forages, fruits, ornamental horticulture, farming systems and aquaculture. Within these priority commodities, it funds proposals from producers and researchers under a competitive research grant system. The emphasis on research is to be practical rather than academic. The Foundation does not carry out agricultural research by itself. Instead it acts as a facilitator through Jamaican Agricultural Research Program which is different from a purely coordinating activity. It also encourage training as well as promoting environment for research ; e.g. assistance in setting up the Jamaican Society for Agricultural Science. Jamaican Agricultural Research Program has operated with a small staff within the Foundation and depended heavily on USAID/Jamaica Project Funding in the beginning. In recent years it has been seeking support from the farming community.

(iv) Ecuadorian Foundation for Agricultural Development: The agricultural research program of the Fund focuses its research on prioritizing commodities. The prioritization is based on many factors including market potential. The Foundation operates a competitive research grants program where producers and researchers submit proposals for research on problems of priority commodities. An interesting feature of this Foundation is that it emphasizes farmer participatory and system approaches in carrying out on-farm research which makes it more responsive to farm-level production constraints and farmer preferences for greater incomes from related crops. The Foundation has served more as catalyst of agricultural research which is done by researchers in other organizations such as universities. Its facilitator role has been helpful in energizing and integrating the agricultural research, extension and education functions. The initial support for this

Foundation's operating expenses came from USAID/Ecuador - funded REE project. In recent years it has been able to obtain funds from private groups such as melon, cassava and rice growers, from management fees of donor projects, and through setting up of joint ventures.

#### **LESSONS:**

Byrnes and Corning, 1993, were attempting to analyze the four cases, in the study referred in the section above, from the point of view of sustainability. The question that they asked was: whether an assisted organization will develop sustainable capacity for technology generation and transfer? Their criteria of sustainability is defined in terms of a single objective of financial sustainability; i.e. sustainable without continuing subsidization of operating costs by an external donor. Their thesis has been that a research institute will be able to sustain financially if it is able to provide a marketable service so that the clients will cover the costs and the institute will then gain the necessary revenue. In this connection they have argued that some of these foundations were set up, as "supply driven" but to succeed they must become "demand driven." Their analysis articulates five lessons learned from an analysis of these four cases.

(i) "Certain areas of agricultural research will remain the responsibility of the public sector. The management and administration of donor funds supporting such research activity can be carried on more effectively by a private sector organization."<sup>76</sup>

(ii) "The Change in USAID's development assistance policy in the 1980s towards creating and supporting private sector organizations reflected a supply - driven assumption - "If we fund it, it will be sustainable." Inadequate attention was paid to helping the assisted organizations to develop a "demand - driven" approach."<sup>77</sup>

(iii) "The sustainability of an organization's agricultural research program is interrelated with the greater problem of the sustainability of the organization itself."<sup>78</sup>

(iv) "Development of sustainable capacity for demand - driven technology generation and transfer requires that technology beneficiaries play an active role in setting up research agenda and that they provide at least some of the funding required to support implementation of the research."<sup>79</sup>

(v) "Sustainability must be chosen and achieved by the assisted organization. This

is best achieved by allowing responsibility for allocation of resources to reside with the principals of the organization. An organization that is deprived of the freedom to fail will be severely hampered in terms of its chances to succeed."<sup>80</sup>

Burkhalter, 1993, made sustainability assessments of ACSI/CCCD<sup>81</sup> and the government projects dealing with primary health care programs in Guinea, Lesotho, Nigeria and Rwanda in late 1992 and early 93. The CCCD projects provide support to the same type of programs and activities in each of these four countries. These are: immunization, control of diarrheal disease, malaria, health education, staff training, health information systems, and operations research. A project is defined to be sustainable if "at least one major activity of the project or its benefits" continue for at least three years after the ending of the USAID funding. The sustainability strategy and assessment is based on the assumption that the strategy is sustainable if it has five attributes: namely, (i) perceived effectiveness, (ii) integration (iii) local financing, community participation, (iv) staff training, and (v) respectful negotiation. The study found that in spite of poor economic conditions and unstable political situation, the four projects were sustained to a surprisingly high level. The lessons learnt from this assessment are:

(i) African health projects can be sustained.

(ii) Sustainability is multidimensional, in the sense that several factors contribute to the sustainability of project activities and benefits.

(iii) Continuing financial support from other donors seems to be a successful strategy.

(iv) The strategy of supporting existing programs appeared to be one of the keys to sustainability of direct components.

#### **VALIDATING THE ANALYTICAL FRAMEWORK:**

The lessons learned from the above two studies are consistent with many other studies in so far as they come to similar conclusions., studies from IDMC referred in section 3 on SB.<sup>82</sup> These conclusion, and findings, validates our thesis formulated in the SB function (2) in section 4 where SB depends upon four factors: local resource capital, local financial capital, local social capital in the form of local institutions and participation by people involved. Thus, in the case of agricultural research in the four Latin American

and Caribbean countries, Byrnes and Corning, 1993, specifically state that (i) the assisted organization must be able to make its own decisions - institutional and social capital, m in the SB function (2), (ii) need to involve the farmers and growers, i.e. beneficiaries/clients, to decide about the research agenda - participation, P in the SB function (2), (iii) funding must not depend on only source but should come from the local clients such as farmers and growers - local financial capital, ec. in SB function (2) and, (iv) local resources are available in the sense that these research programs are situated in larger foundations - physical capital, en, in SB function (2). Similarly, conclusions and recommendations in Burkhalter, 1993, validate the reasoning and the elements developed in the SB function (2); for example when they suggest (i) that the project should support an already existing program implying the support from local and national participation, i.e. social capital and participation, (ii) funding should come from more than one donor so that there is a source of financial capital, (iii) sustainability is multidimensional which means all these four elements are relevant.

The SD concept is somewhat new and deals with the development of the country or economy as a whole. There are very few studies done on SD so that it is not possible to analyze a particular case of sustainable development from the perspective of the SD function. Still, these two case studies have made references to the larger macro issues which do support the logic articulated in SD function (1). This follows from the observations regarding the multidimensionality of SB, the need to situate the projects in the larger framework, integration of the projects into existing institutions, participation and decision making by the host country and the beneficiaries.

Having found empirical support for our analytical framework, we can now turn to deriving implication for policies for USAID to promote SD. This we do in the following section.

## 6. POLICIES

Focus shift and implied policies

Team Work and Evaluation

Results and Accountability

Participation and Shift in USAID practices

Recommendations for Donors: Common agenda, coordination and Leverage

### FOCUS SHIFT AND IMPLIED POLICIES:

Policy is a broad term. Webster's Ninth New Collegiate Dictionary gives the term two meanings. "1.a: prudence or wisdom in the management of affairs, b: management or procedure based primarily on material interest. 2. a: definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions, and b: a high-level overall plan embracing the general goals and acceptable procedures esp. of a governmental body." It refers to both management procedures and an overall plan. General goals are formulated at the highest administration level and the procedures determined at the intermediate and field level such that these goals are achieved. Both SB and SD define general goals and procedures to achieve these goals. SB of projects emphasize procedures. The importance in SD is on the general goals, as *The Strategic Plans* document states that "Sustainable Development is a dynamic process, not a fixed objective. It requires building lasting individual, institutional and societal capacity to respond to changing circumstances, new needs and evolving opportunities."<sup>83</sup>

Most of USAID work has been project related providing delivery of services to various constituencies where SB has become, in recent years, one of the major objectives. To achieve this goal, the policies had been developed such that the benefits can be delivered most efficiently and effectively. With increasing concern for SD, there is a greater emphasis on macro policies. Accordingly, there is a movement towards formalizing "Country Program Strategic Plans" These are expected to be multi (5 - 8) year plans to establish a framework for programming USAID assistance to a particular country. This concern for SD, emphasis on macro policies and environment, and development of

country plans involves a major shift in USAID objectives since it shifts focus from micro management of projects to development in the large and therefore a need to give greater significance to the results of these efforts. In its own language, "USAID has embarked on an ambitious effort to *shift its focus* of attention from managing inputs to achieving development results."<sup>84</sup> There is thus an evaluation shift; from inputs to outputs.

One can argue, as we have, that it is the concern for SD that is the guiding force behind this shift *in focus* which has major implications both in terms of formulation of policy and its implementation. We have defined SD in the USAID context as an integration of the priority sectors. The integration involves many inferences. It means that the AID missions have to look into the effects of its assistance programs in as many priority area as possible. *Guidelines 94 Draft document*. provides proper directives; " If a mission concludes that it cannot with its limited resources focus on any environment need in and of itself, that mission should demonstrate that its program, while focused on one or more of the other three focal areas (population/health/nutrition, democracy, and economic growth), also contributes directly to resolution of an important environment problem or satisfaction of an important environment need."<sup>85</sup> Again, " Programs in other sectors where USAID provides assistance also should be evaluated for their potential impact on democracy and governance concerns."<sup>86</sup> Similarly, economic growth is defined more broadly than an increase in the per capita income. "To meet USAID's development [SD objectives, economic growth must be:" rapid, broad based, sustainable, environmentally sound, and participatory."<sup>87</sup>

This focus shift has radical implications since it involves changes in USAID's existing policies and practices as well as the development of new ones. There are very many policies and most of these are highly interrelated; more so when activities are integrated. We discuss a few of these; partly because discussing all is a stupendous task and partly because these are the more important ones. These relate to team work, evaluation criterion, accountability, results and participation. Because these are related, the order in which these are argued and developed is immaterial. It is to the policy implications in these areas that we turn in the following sections.

## **TEAMWORK AND EVALUATION:**

Since country program strategic plans are expected to look into the impact in all the four areas, the design, implementation and evaluation of these plans and resulting activities require a team of people working together. Thus, there has to be a "teamwork approach." There is now a good deal written on team work; its strengths and weaknesses and the way to implement these.<sup>88</sup> Teamwork promotes wider participation which, as we have argued above, is an essential element in SB function. In the medium and long run, it is an efficient method because it (i) makes it possible to follow multiple objective activities, (ii) leads to increases in productivity and (iii) reduces costs both due to increased productivity and reduction in managerial costs which are generally rather high because managerial services are scarce. In view of its efficiency, team work is becoming an important part of the skills being taught in universities.<sup>89</sup> There is enough market demand for these skills so that there are now private companies that specialize in the supply of skills based on teamwork approach. In the short run, however, team work may look expensive because of needed investments in the provision of these skills through training in changed work procedures and decision rules.

Generally staff is evaluated, individually, on the basis of how it has expanded the resources allotted under his/her charge. There are thus two dimensions in the evaluation procedures: (i) and individual staff member, and (ii) a measure of activity defined by inputs. With concerns for SD, multiple objective activities and an emphasis on integrating activities in different areas, work is done not individually but instead in teams. Similarly, such work is not definable by the expending of inputs. Instead a proper measure of the work done is the final output. Therefore, what need be evaluated is not inputs but outputs, and not an individual staff but the whole team. The existing evaluation procedures that do not take into consideration these two factors are no more efficient. The evaluation criteria must change and be consistent with both the measurement of outputs and teamwork approach. Procedures to evaluate teams and measure outputs are very different from those that evaluate individuals. The new criteria thus evaluates the project in the medium and long run as well as the team responsible for it. The incentives need to be redesigned so that the individuals in the team can be motivated to be creative, work hard and

effectively with other members of the team and be output oriented.

We therefore suggest that USAID should provide training for (i) orientation to measure outputs, and (ii) acquiring teamwork skills to all its existing staff, specially in the missions. It should develop necessary incentives for the project staff to teamwork, output orientation and redesign the evaluation criteria that are consistent with such a shift in focus.

### **RESULTS AND ACCOUNTABILITY:**

Development activity, both by USAID and host countries, depends upon financial and managerial resources. Both of these are scarce and have alternative uses. The proper allocation of these resources is important for the goal of SD and makes all the difference between success and loss. One has to choose between different alternatives so as to employ these scarce resources most efficiently. The SD function (1) develops a complex relationship wherein different sets of capital; natural, physical and social, join together to promote development. Its implication is that the results of development activity and their evaluation is rather crucial. *Guidelines 94* correctly emphasizes this issue and entitles the very 1st section as: "Achieving Results: The strategic Management Process.<sup>90</sup>" To quote, "Implementation Guidelines are part of the new programming process that emphasizes clear strategic objectives and marshaling USAID resources, both financial and human, to achieve results."<sup>91</sup> It sets up a series of procedures to ensure results: formalization of central, regional and country program strategic plans, development of annual plans from therein, participation by various constituents, review and approval and finally regular performance monitoring. The results are determined on the basis of how activities have performed in relationship to plans. These various procedures need to be formalized such that some quantitative and qualitative criteria for the measurement of these results can be developed.

Development involves decision making. The issue is: who makes the decisions and how are decision makers evaluated? If decision makers are not accountable for the outcome of their decisions, there is no incentive for them to make efficient decisions. For example, if the decision maker changes his/her job after a decision has been made there

is no one accountable for the lack of success of such projects. On the other hand, to be accountable for the outcomes of one's decisions, there has to be well defined correspondence between decision making and the outcome. Market enforces discipline on the decision maker by providing gains (and losses) on the basis of favorable (unfavorable) outcomes of these decisions. The market works through a single financial criterion. In case there are multiple objectives for decision making, these objectives have be defined so that multicriteria analysis can be applied.<sup>92</sup> The fact that decisions may require team inputs adds another dimension to the motivation and accountability criteria. There is then a need for alternative or supplementary criteria for the elaboration of incentives and accountability. In the last analysis, accountability and motivation depends crucially on the results and their measurement.

We suggest that USAID should develop a capability for multicriteria analysis both in terms of the collection of necessary data inputs and its use in decision making. It should also develop multidimensional criteria, both quantitative and qualitative, for the measurements of results of development activity consistent with SD. These should be simple and straightforward enough so that they can become both a source of motivation and a way of evaluating accountability.

#### **PARTICIPATION AND SHIFT IN USAID PRACTICES:**

The distinguishing feature of *the focus shift*, following from a concern for SD, is an emphasis on participation by all relevant constituencies at different levels of design, implementation and evaluation. This feature is new and follows from SD. As noted earlier, *Strategies 94 document* asserts, appropriately and emphatically, that "sustainable development **mandates participation**. It must involve, respond to, and be accountable to the people who will live with the results of the development effort."<sup>93</sup> It may be noted that the term chosen to stress participation is "mandates", i.e. participation is not simply suggested, instead it is required. This emphasis is fully consistent with our formulation of the SB and SD functions both of which require it as an essential element. The converse of these functions is that policies and processes that promote SD require participation in an essential way. This is also the conclusion of a large number of assessment studies;

some of these presented above in section 3. *Guidelines 94 document* gives participation a prominent place by making it one of the steps in the management process to achieve results. "Both strategic plans and annual action plans are to be developed, updated, and monitored in consultation with a broad range of development partners.... genuine participation must be an essential hallmark of USAID planning and program implementation."<sup>94</sup> The emphasis on participation is consistent with the broad goals of democratic institutional principles. It makes good economic sense because it implies that objectives be well defined, most suitable means chosen to achieve the desired outputs/services thus ensuring economic efficiency.<sup>95</sup> In economic language, it implies that there is demand for the final products and the production process follows the least cost alternatives. Participation eventually leads to empowerment, so that the people directly affected by the delivery of products/services can provide the desired inputs in the process thereby making it most efficient.

*The focus shift* and, the emphasis on participation, imply that there is a need for a shift in USAID practices from implementation to facilitation. The country program plans and, the need to obtain highest returns for its limited financial and managerial resources, move it in this direction. This is the recommendations of many studies and the experience of people in the field. Both SB and SD indicate such a shift.<sup>96</sup>

We suggest that the shift towards participation of all groups of people in various stages design, implementation, and evaluation of a project be formulated as a required policy. This requires involving governments, institutions and people from the host country. USAID should change its role from an implementor of projects to one of a facilitator.

## **RECOMMENDATIONS FOR DONORS: COMMON AGENDA, COORDINATION AND LEVERAGE**

The proposition that SD is desirable, even necessary, has gained, in the past few years, a recognition in public mind.<sup>97</sup> This has given the idea about, and concern for, SD a good deal of legitimacy. It has become a part of the agenda for discussion and policy shifts in a number of donor agencies. We have already made references to these concerns in USAID and World Bank. As Russell et al, 1993, have pointed out, concerns

for SB and SD is generally shared by other donor agencies and Non governmental Organizations. As we have pointed out in this paper, USAID has taken a lead and articulated a set of strategies and guidelines to promote a focus shift in this direction.<sup>98</sup> It is in USAID's interests to help other agencies to move in a similar direction both because (i) it provides a leadership role which US has always assumed and (ii) it facilitates the achievement of its objectives about SD and, (iii) promotes greater efficiencies in its program aids and plans by gaining greater expertise and avoiding unnecessary duplications. What is required here is the development of a common agenda between various donor agencies. As we have argued, 'The country program strategic plans' follow from, and relate to, the objectives of SD. These plans, therefore, form a meaningful base for such a common agenda. Such action is already implied in USAID policy statements since *Guidelines 94 document* asks that these plans be drawn in partnership with other development partners; other donor agencies are the most relevant development partner. Various donor agencies working in a country can identify common parts in these plans. These country plans can thus become an important part of common agenda among donor agencies.

If donor agencies can agree to a common agenda, the next step is to develop coordination among the activities of the donor countries. Three areas of coordination deserve attention: (i) Major macro policies dealing with natural, physical and social capital, symbolized as En, Ec and M in function (1) need to be coordinated. These policies deal at a macro level and are essential for the success of micro projects that promote SB. Donor agency coordination helps in promoting desired macro policies. Such macro policies and coordination is necessary because without these macro policies, development activity may not be successful. (ii) Coordination *between* projects that promote SB. Different agencies may like to emphasize different development projects. Coordination will reduce duplication, save costs and help make the most efficient use of scarce resources. (iii) Coordination *within* projects that promote SB and in which a number of donor agencies are involved. Sometimes a number of donor agencies may be involved in the same sectoral type project which falls well within the desired country program strategic plan. Coordination would minimize duplication and identify areas where

different donor agencies can bring forth their greater comparative advantages.

A major lesson of the development experience in the past four decades is that it is a large task. Compared to the needs the combined resources, financial and managerial, of all donor agencies are small and limited. They are scarce and need to be used efficiently. The most efficient use of these resources, as we have argued above, is to involve the host countries and beneficiaries fully in the development process so that they can own the development process and carry it forward as the donor agencies allocate these resources in other priority areas. This is the leverage concept. IMF and World Bank, have used this leverage through the mechanism of "conditionality."<sup>99</sup> USAID has a world wide foreign policy net work and is held in good esteem. Its small resources, when supported by the resources of other donor agencies, can have a much larger leverage or multiplier effect. This is another area where donor agencies can join together. USAID can provide the needed leadership and promote its objectives towards SD.

We suggest that USAID take a lead in setting up a common agenda with other donor agencies on the basis of its country plans. It should coordinate with other donor agencies to promote macro policies that deal with natural, physical and social capital in order to promote SD. It should coordinate, with other donor agencies, both between and within projects that promote SB. It should take the lead to join with other donor agencies in order to gain the highest leverage for its aid in order to promote its objectives towards SD.

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2. It is interesting to note that recently USAID has moved in providing the expertise it has gained from its international operations to help some of similar problems near home as articulated by USAID Lessons Without Borders Conference. USAID rightly deserves credit for it.
3. World Bank had done an internal study of the various concepts. Pezzy, 1992.
4. *It is a large piece of research done by four USAID people at the Center for Development Information and Evaluation.*
5. *Our common Future.* This is the forerunner of the UNCED conference. There are two schools of thought on the issue of environment. One holds that the environment can be managed. This school is represented by some of the mainstream economists. The other believes that we are reaching a point of no return and the attitudes of "business as usual" will not do. This school is articulated by ecologists and some of non main stream economists. Sachs 1993, especially, papers by Achterhuis 1993, Paul Elkins 1993, Daly 1990 and 1992 and Worster 1993 offer arguments for the second school. There is another school which considers problems of environment in ethical and personal terms, which in Al Gore's way of saying may be called, "for lack of a better word, spiritual." Gore 1992, Diwan 1986, 1987, 1988, 1989, 1990, 1991 and Diwan and Lutz 1985, Dass and Bush 1992 express ideas from this third school.
6. "The burning and clear-cutting of the tropical forests, the thousand-fold increase in the rate at which living species become extinct, the poisoning of our air and water, global warming and stratospheric ozone depletion - all these tragedies and more were suddenly recognized as different pieces of the same puzzle, or to put it another way, different consequences of the collision between our worldwide civilization and the ecological system of the earth." Gore 1992. p. xii
7. It is interesting to note that this journal started in 1989 and has been growing at a geometric rate. By 1994 it publishes 9 issues a year and has 1700 paid subscriptions from 60 countries.
8. Tisdell, 1988 emphasizes, somewhat unfairly, the differences between these two perspectives. In the process his critique is somewhat contrived and he misses some of the essentials in the argument.
9. *Finance and Development*, December 1993. p. 6
10. *Ibid.* p. 6
11. *Strategies for Sustainable Development* (March 1994) page 3
12. *Ibid.* p.3

13. *Ibid.* p 3
14. *Ibid.* p.3. Emphasis in original
15. Russell *et al.*, 1994. p.3.
16. Thurrow, 1984, p. 4. It points out the basic problem in economics: the microeconomics has no macroeconomics and the macroeconomics has no foundation in microeconomics.
17. This is a view shared by Dr. Jerry Wolgin in USAID Africa Division.
18. Russell *et al.* 1994. p. 30.
19. This has been enunciated as the fourth law of ecology. Commoner 1971.
20. *Guidelines for Strategic Plans: Draft 6; June 20, 1994, "Technical Annex B: Environment" page 1.*
21. At the UNCED conference in Rio there was a general agreement to attempt achieving "environmentally sustainable development."
22. There is a general tendency in development oriented agencies like the World Bank to define success by economic criteria. Thus it has called "Asian Economic Miracle" by "The East Asian Miracle" in its book. World Bank, 1993.
23. World Bank classifies economies on the basis of GNP per capita. " For operational and analytical purposes the World Bank's main criterion for classifying economies is gross national product (GNP) per capita." *World Development Report 1994*. p. ix. Diwan and Livingston, 1979, provide an explanation for using GNP per capita as a measure for development. Chapters 3 and 4.
24. Russell *et al.* 1994. p. 89
25. *Guidelines for Strategic Plans: Draft 6; June 20, 1994, "Technical Annex D: Economic Growth" page 2.*
26. These are, by now, classic arguments in this regard." The pollution problem is a consequence of population....as population became denser, the natural chemical and biological recycling processes became overloaded....Freedom to breed will bring ruin to all." Hardin 1968, pp. 1243 - 48. Again, " The causal chain of the deterioration [of the environment] is easily followed to its source. Too many cars, too many factories, too much detergent, too much pesticide, multiplying contrails, inadequate sewage treatment plants, too little water, too much carbon dioxide - all can be traced easily to too many people." Ehrlich 1968, pp. 66-67.
27. *World Development Report 1993: Investing in Health.*
28. Russell *et al.* 1994. p. 49
29. *Guidelines for Strategic Plans: Draft 6; June 20, 1994, "Technical Annex : Population, Health and Nutrition" page 3-4.*
30. Russell *et al.* 1994. p. 69

31. The Economist dated August 27- Sept 2 argues in favor of Democracy as a means to economic growth. A miniconference held by IRIS on "The Paradoxes of Poverty" on May 27, 1994 also suggests that democracy is helpful to growth.
32. *Guidelines for Strategic Plans: Draft 6; June 20, 1994*, "Technical Annex C : Democracy" page 2.
33. Serageldin, 1993, p. 6.
34. *Strategies for Sustainable Development* (March 1994) p.10
35. Ibid pp. 4-5
36. Ibid. p.5
37. Mike Crosswell pointed us in this direction.
38. Pezzy 1992, pp 61 - 62
39. "The case for environmentally sustainable development is usually argued in economic and technical- ecological terms. As has happened in other areas, many are tempted to think that if they can "get the economics right," everything else will fall into place. Soothing as this economic-mythical invocation may be, it is nonetheless one-sided. The social components of sustainability are no less important. Indeed, failure to recognize the determinant role of the "social actors" has doomed many programs trying to induce development." Cernea, 1993, p.11
40. We had a very interesting discussion with Dr. Michael Bamberger of World Bank. He pointed out how many of the projects have affected negatively on some poor sections of the society and how it has not been possible to consider the sufferings of these victims. A number of scholars worry about the sufferings of the victims and wonder if the projects and development process do not produce more victims than beneficiaries. They find the whole approach to development misdirected. This argument is well developed in Sachs (1992) which also gives a number of detailed references.
41. In a landmark case, the World Bank appointed an independent commission of enquiry about the costs and benefits of the Sardar Sarovar at the Narmada Dam in India. The commission concluded that costs were too large so that the World Bank withdrew its financing for the project.
42. There is a very subtle distinction between poor and needy. There is a good deal of literature on the meaning of "need". Some scholars have argued that the process of development promotes "needs" instead of satisfying them. Illich 1978 provides a thoughtful analysis. "Thus, the human phenomenon is no longer defined by what we are, what we face, what we can take, what we dream; nor even by the modern myth that we can produce ourselves out of scarcity; but by the measure of what we lack and, therefore, need." Illich, 1992. p. 99
43. Gustafson 1992, p 1
44. USAID, ISSO, reviewed health, population and nutrition programs in six countries and came to similar type conclusions. Bossert 1990 found some of the reasons for lack of sustainability in health projects in terms of weak economic and political context and poor institutional development.

45. Bamberger, and Cheema, 1990. p. 5
46. In our discussion with Dr. Bamberger, he suggested that it is not easy to analyze the sustainability because no data are collected after the project closes. When some studies are done after the closure of the project they normally interview only the beneficiaries who are generally favorably disposed since records are kept only of the beneficiaries and not of the victims. The results of such analyses therefore are biased upwards so that the reality may be that the success rate of projects in terms of sustainability may be still lower.
47. Agriculturalists and natural scientists look at the problem of sustainability from the point of view of ecological integrity because they accept the proposition that nature is a constraining asset without which production is not possible. Much of the pressure to add the environmental dimension to development has come from biologists, ecologists and agriculturists and a few economists.
48. Economists assume that the market, and the prices it sets, can take care of all type of problems. Their concern, therefore, is to remove all type of market distortions. They believe in economic growth as a panacea. In their view, the distinction between natural and manmade capital is illogical. They are interested in trade offs; market price ensures the right trade off.
49. Management types believe that they can manage everything so their emphasis is on the integrity of organizations and the setting up of institutions where institutions are interpreted broadly including the rules of the game.
50. Goldsmith, 1988, p. 10
51. White, 1987, p.1
52. White 1990 a and b further elaborates some of these issue in different contexts.
53. Many working papers at the IRIS center have advanced the idea that institutions as "rules of game" are important, even necessary, requirements that provide the environment for markets to flourish and perform their meaningful function of setting the price right.. e.g. see Clague 1994.
54. " Institutions form the incentive structures of a society, and the political and economic institutions, in consequence, are the underlying determinants of economic performance." North, 1994, p. 359
55. Finsterbusch *et al*, 1992, reviewed 71 post project evaluation reports and examine the factors that contribute the project effectiveness and sustainability.
56. O'Sullivan, 1991, analyses the sustainability of World Bank poverty alleviation projects and finds that these have not been successful because of inadequate attention paid to institutional factors.
57. Hannah *et al*, 1994, study the organization and administration of rural development projects and offer guidance for design and implementation of projects.
58. This is not as simple as it sounds because what is appropriate in one situation may be inappropriate in another. Defining what is appropriate involves a good deal of study and analysis. For example, Diwan and Chakarborty (1991) find that in case of high technologies, labor and capital are complements instead of being substitutes as assumed in standard production theory. This change involves a whole set of different principles; thus labor becomes

an asset instead of being a cost. Similarly, Diwan and Kallianpur (1985,1986) find that biotechnologies are more productive in small as compared to larger farms while fertilizer price policy has not recognized this fact.

59. In physical science there is a reversal of roles. molecules that is an aggregate sound far more real than the electrons, protons and neutrons which can be studied only through laws of probability and statistics. In biology also, microbes and viruses are too small to be studied individually while their aggregates sound far more real.
60. The World Bank has articulated these three approaches to SD. In fact there are other approaches as well. In the last analysis, the issue is to improve nation's well being. It depends upon economic growth, distribution of income, poverty and equity, development of human resources and skills, maintenance of the environment integrity, social, political and spiritual aspects of human well being. Diwan and Lutz (1985), Diwan (1994) discusses some of these issues. Daly and Cobb (1989) have estimated an index of sustainable economic welfare (ISEW) per capita for USA for the period 1950 to 1986 and compared it with GNP per capita. Their conclusion is that ISEW per capita has been going down since 1969 so that GNP per capita and ISEW per capita lead to completely opposite conclusions. pp. 418 - 419.
61. We are aware that the relationship is rather complex and we may be criticized on the basis of the "fallacy of misplaced concreteness." On the other hand, a formalization like this has the effect of highlighting certain factors; this is all that is intended here.
62. "Organizations incorporate important accumulation of human experience and knowledge, which is social capital. And new and growing social capital is indispensable for the social sustainability of development." Cernea, 1993. p. 13
63. One can even make a stronger statement that development takes place only, and only if, SB condition is satisfied. In fact part of the reason to move towards the SB concept has been the experience of projects which vanished with the end of the project thus leaving little impact on development.
64. In fact the history of economic growth in virtually all over the world confirms this statement. World Bank and IMF place a great deal of emphasis on the "right" macroeconomic framework.
65. Steer and Lutz, 1993, discuss the problems associated with such integration.
66. UN Development Programs has developed a Human Development Index to emphasize the need to take into consideration some of the social indicators. Though this methodology is somewhat limited and deficient, it does support the idea that social indicators are as important which in turn implies that these are a necessary condition for SD.
67. WCED 1987
68. Munasinghe, 1993, argues that environment and social concerns have helped to promote better techniques of analysis; such as multicriteria analysis. "A recent [World] Bank study of power system planning in Sri Lanka demonstrated the versatility of this technique. For example, end-use energy efficiency measures provided "win-win" options ( i.e., they were superior to all other alternatives on the basis of air-quality, biodiversity loss, and economic costs.) Conversely several prominent hydropower projects could be excluded because they performed poorly in terms of both bio diversity loss and economic costs." p. 18

69. *Statement of Principles on Participatory Development*, November 16, 1993, by Hon. J. Brian Atwood, Administrator, USAID
70. World Bank organized a "Workshop on Participatory Development" in May 17 - 20, 1994 that analyzed the importance of participation by all those involved and affected to the process of SD. Mr. Williams informed us that the issue of recognizing the importance of participation is now being considered at the highest level of the Bank hierarchy.
71. It is a grass root movement that sprung up to save fellow Indians from relocation as a result of the big Narmada dam in Gujerat, India. It has gained momentum in recent years and influencing policy at the national and international level.
72. This is a grass root movement of Mexicans of Indian descent which gained international visibility and made Subcomandante Marcos a household name.
73. NIMBY stands for Not In My Back Yard. It refers to a number of local initiatives, all over the country, denying access to nuclear and toxic plants.
74. Officially, it was the Government of India which withdrew its application seeking financial support from the World Bank but the immediate cause was the report of the Independent commission which made World Bank look bad.
75. Ideally one needs to have an access to the details of the project from which one can analyze the relevance of the ideas presented above. Such facts are generally not available; partly because these are too voluminous, partly because they are of confidential nature and partly because USAID many a times plays a small part in the totality of these projects.
76. Byrnes and Corning, 1993, p.18
77. *Ibid.* p.20
78. *Ibid.* p.22
79. *Ibid.* p.26
80. *Ibid.* p.31
81. Acronyms ACSI stand for Africa Child Survival Initiative, and CCCD for Combating Childhood Communicable Diseases.
82. White, 1987, has developed a good summary of such lessons and conclusions. These lessons support her findings.
83. *Guidelines for Strategic Plans. Draft 06/20/94*; p. 3
84. *Ibid.* p.2. [emphasis added]
85. *Guidelines 94*, Technical Annex B: Environment, p.2
86. *Guidelines 94*, Technical Annex C: Democracy, p.2.
87. *Guidelines 94*, Technical Annex D: Economic Growth, p.2-3

88. "It's also quite remarkable how effective team use in the excellent companies meets, to a tee, the best academic findings about the make up of effective small groups." Peters and Waterman. Jr., 1982, p.127.
89. For example, in my own university, Rensselaer Polytechnic Institute, there is a growing number of courses that require team projects where grades are given not to individual students but to the team itself.
90. *Ibid.* page 2-3.
91. *IBID.* p.2, emphasis added to highlight the issue.
92. The multiple criteria case give rise to the problems of externalities in economics. Multicriteria analysis is still a new idea. It needs a good deal of refinement before it gets acceptability.
93. *Strategies 94 document* page 3. Emphasis on participation in original and on 'mandates' added.
94. *Guidelines 94 document* p.2
95. "Mancur Olson, of the university of Maryland, is a leading analyst of the economic weaknesses of democratic government. His is the definitive account of the economics of rent-seeking, free-riding, lobbying and the destructiveness of interest-groups. Yet he also argues forcefully that democracy is far more conducive to long term economic growth than dictatorship, even of an apparently benevolent kind." *The Economist*. August 27 - September 2nd, 1994. p.17.
96. This point was suggested to me by Dr. Jerry Wolgin of USAID's Africa Division
97. The UNCED conference in 1992 was the largest mega conference which was attended by 100 heads of state. This has helped to give prominence to the idea of SD.
98. We have referred to and quoted from two major USAID policy documents, namely, *Strategies for Sustainable Development* (March 1994 and *Guidelines for Strategic Plans: Draft 6; June 20, 1994*.
99. The "conditionality," though logically appealing, has brought stigma to these agencies causing a major friction in the pursuit by governments of IMF recommended policies. Many a times, these policies have not worked and have been instead counterproductive.

### About Romesh Diwan

Romesh Kumar Diwan, Professor of Economics, was chairman from 1982 to 1987, at Rensselaer Polytechnic Institute, Troy, NY 12180, USA, earned his Doctoral Degree in Economics from the University of Birmingham, United Kingdom. Prior to joining the faculty at Rensselaer, he taught at Punjab University (India), the University of Glasgow (Scotland), and the University of Hawaii (United States). He has served as Consultant to the United Nations (UNCTAD) and held visiting positions with Washington University (St. Louis), London School of Economics, and Gadjah Mada University. His research interests lie in six areas:

- (i) Economics of Competitiveness - current,
- (ii) Economics of Productivity and Technical Change - currently High Tech Industries,
- (iii) Philosophical Issues in Economics - Gandhian Economics,
- (iv) Economic Development with Special Interest in Indian Economy, (v) International Economic Order, and
- (vi) Economics of Appropriate Technology.

He has been a thesis advisor to 30 Ph. D.'s, and has hosted a Fulbright Scholar. He has been a Consultant to MTI and United Nations. He has been an NSF Grantee. He organized an International Seminar on Gandhi and 21st Century, New Delhi, 1987; an International Conference on People of Indian Origin and World Development, New York 1989.

He has published the following books:

1. Alternative Development Strategies and Appropriate Technology: Science Policy for an Equitable World Order (Dennis Livingston, Co-author), Pergamon Press, Elmsford, New York, 1979.
2. Essays in Gandhian Economics (Mark Lutz, Co-editor) Gandhi Peace Foundation, New Delhi, 1985; Released by Intermediate Technology Development Group, New York, 1987.
3. Productivity and Technical Change in Foodgrains (Renu Kallianpur, Co-author) Tata-McGraw Hill Publishing Co., New Delhi, 1986.
4. High Technology and International Competitiveness (C. Chakraborty, Co-author), Praeger Publishers, New York, 1991.

In addition, he has organized and edited (i) Conference Proceedings for Association of Indian Economic Studies (AIES) Vol. I (1976) and Vol. II (1978), (ii) Seminar, Vol. No. 271 (1982) and (iii) Asian Thought and Society, Vol. XI, No. 32-33 (1986).

Professor Diwan's 100+ articles and book reviews have appeared in such journals as: *American Journal of Agricultural Economics*, *American Economic Review*, *Applied Economics*, *Asian Thought and Society*, *BJP Today*, *Boletim de Diplomacia Economica*, *Bulletin of Atomic Scientists*, *Development (Journal of SID)*, *Eastern Economic Journal*, *Economic and Political Weekly*, *Economic Development and Cultural Change*, *Economica*, *Economic Letters*, *Gandhi Marg*, *Gandhian Perspectives*, *Indian Economic Journal*, *Indian Journal of Quantitative Economics*, *International Journal of Indian Studies*, *International Journal of Social Economics*, *Issues in International Business*, *Journal of Asian Studies*, *Journal of Development Studies*, *Journal of Economic Issues*, *Journal of Energy and Development*, *Journal of Financial and Quantitative Analysis*, *Small Business Economics*, *Science and Society*, *Southern Economic Journal*, and *World Development*. He has also written for the popular press and appeared on radio and television in many countries.

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