Role of indigenous technologies in relation to capability approach and human development of Indigenous Peoples

Purshotam Singh, Manpreet Singh, Sameera Qayoom, BA Lone, SK Raina, Parmeet Singh, Lal Singh, Latief Ahmad, RH Kanth and FA Aga

Abstract
Indigenous peoples have historically been the poorest and most excluded populations in many parts of the world. They have not only faced serious discrimination in terms of their basic rights to property, language, culture and citizenship but also in terms of access to basic services and essential material conditions for a satisfying life. In many countries there exists a high correlation between poverty and being indigenous with the socio-economic conditions and access to basic social services significantly worse for the indigenous peoples than for the non-indigenous population (Davis, 2002, Partridge et al. 1998). Over the past decade there has been a strong reaffirmation of indigenous identity and important advances in indigenous peoples’ human development. In particular, there has been an emergent trend of strong indigenous organizations and a new indigenous leadership as well as a growing awareness of the mestizo population about the multi-ethnic and pluricultural character of societies. This new trend of the strengthening of the indigenous movement forms the basis for indigenous peoples to define their own development priorities and to become the agents of their own human development.

Keywords: indigenous, historically, poverty, culture etc.

Introduction
No universal definition of indigenous peoples exists and due to the history of political repression, discrimination and assimilation policies by states, indigenous peoples usually reject to be defined by external agencies. In order to be able to identify rather than ‘define’ indigenous identities the paper uses the working definitions provided by the International Labor Organization (ILO) Convention 169 and the UN Special Rapporteur José Martinez Cobo. Both approaches emphasize that self-identification as indigenous should be used as the main criteria; while underlying the following aspects as critical to indigenous identities: i) historical continuity with pre-colonial societies; ii) strong link to territories; iii) distinct social, economic and political systems; iv) distinct language, culture and beliefs; and v) self-identification as different from national society. From an indigenous perspective, the right to self-identification is essential to ensure that they are respected as peoples and communities with their own identities, cultures, languages, worldviews and religions.

Within this context the paper will investigate to what extent the CA is a suitable theoretical framework for the analysis of the well-being of indigenous peoples. The emphasis of the research will be hereby to provide an account of the views and perspectives of indigenous and to illustrate how communities themselves can become the agents for the improvement of their human and collective well-being.

1. The capability approach and the challenge of selecting human capabilities
The capability approach (CA) views development as a process of expanding people’s human capabilities or their ability to achieve things they have reason to value. The need to refocus development on ‘people’ and points out the necessity of viewing human beings as ends in themselves and never as only means to other ends. What matters is what people are capable of being or doing with goods to which they have access. The emphasis of the capability approach lies on the evaluations of people’s functions (their beings and doings) and capabilities (their real or effective opportunities to achieve those functionings). Thus, the capability approach provides a broader informational base for conceptualizing development
than more traditional approaches, which typically focus on resources or utility (Nussbaum, 2000) [17]. While there are several examples of valuable capabilities (i.e. being well-nourished or being able to keep warm), but does not prescribe a specific list of capabilities or functioning’s nor does there exists precise guidelines on how the selection of relevant capabilities should be done (Fukuda-Parr 2003, Robeyns 2003 and Sen 1993). For this reason the capability approach has been criticized as theoretically incomplete (Comim, 2001; Nussbaum, 1998p.152) [9, 18] and there is need to advocated for the need to define a specific list of basic capabilities (Nussbaum, 1995, 2000) [19]. The approach for general framework for the evaluation of human well-being and needs is (i) to be combined with a different social theory and (ii) to be adopted to diverse local and cultural contexts. The role of agency and the freedom of people to make their own choices and the need for ‘democratic processes’ to define which capabilities are the most valuable within the context of a specific local and/or cultural context. Thus in order to operationalize the approach, this implies the need for the effective involvement of people in their own development. The capability approach puts therefore the effective and meaningful participation of people in the center of development.

2. Indigenous peoples and the capability approach
The following section will show that the capability approach is very well suited for the analysis of the well-being of indigenous peoples.
First, both approaches take a holistic view on development and stress the multiple dimension of development as the expansion of people’s well-being including social, cultural and spiritual elements. Similar to the indigenous peoples perspective on development, the capability approach provides a fuller recognition of the variety of ways in which lives can be enriched or impoverished not only based on real income, wealth, resources or primary goods.
Second, the capability approach focuses on the evaluation of peoples well-being directly (i.e. indicators of quality of life) and moves away from assessing development programs through measuring inputs or means (i.e. increase in incomes, or consumptions) This goes hand in hand with the indigenous peoples perspective, as it points out that conventional approaches to development have overemphasized material and other forms of deprivation (i.e. lack of income and low levels of literacy) without adequately taking into account their rich cultural identity and traditional knowledge.
Third, belief that value judgments about the priorities of development i) have to be performed by individuals and society by themselves and ii) have to be made explicit by the theoretical framework. The conventional welfare economics focuses on finding solutions to the issue of the efficient allocation of resources, while the issue of the equitable distribution of resources is being frequently neglected. In the capability approach, an “evaluative exercise” is to be performed by individuals and society through a public discussion and democratic process in order to form these value judgments. This openness of the approach is particularly suitable for applying it to the issues related to enhancing the well-being of indigenous peoples. The indigenous peoples frequently criticize development programs as being based on Western values and representing a continuation of the assimilation of indigenous peoples in to dominant society, thus undermining their cultural identities and worldviews (Albó, 1996) [1].
Fourth, the CA stresses similar to indigenous peoples the crucial role the process itself is playing for development. In this sense capabilities are a kind of freedom for a person to reach the life she or he values. The importance of the process in expanding the capabilities of a person itself is essential for development and the analysis of the actual outcomes (Functioniong) of this process is secondary. Hereby the CA very much coincides with the perspective of indigenous peoples, who highlight the key role the process plays for their development. Indigenous peoples stress that they are frequently deprived from having opportunities in the economic, political or social spheres of their lives. There exist too many barriers which impede them from taking and realizing the life decisions they value. Indigenous leaders highlight indigenous peoples’ need for more equal options and opportunities. At the same time they are aware that they need first to strengthen their capabilities in order be able to take better advantage of opportunities they obtain.

3. The situation of indigenous peoples
There has been a trend towards the revitalization of indigenous people’s identity and culture. This revitalization includes (i) the constitutional recognition of the existence of the pluricultural and multi-ethnic character of many societies in national constitutions; (ii) the emergence of strong indigenous organizations at the regional, national and local level; (iii) the establishment of territorial spaces (protected areas) managed by indigenous peoples; (iv) the increased self-identification of many peoples as indigenous, and (v) the increased recognition of indigenous issues within international donor agencies, such as the World Bank and the Inter-American Development Bank. In spite of these important advances, the improvement in the living conditions of indigenous peoples has been minimal and most indigenous peoples remain excluded from such basic services as electricity, education and health.

4. Indigenous peoples and human development
It is important to highlight that the above described socio-economic situation of indigenous peoples strongly emphasizes their material deprivation and high poverty levels. In contrast to the ‘outsider view’ of researchers and development professionals, indigenous peoples themselves emphasize the non-income dimensions of well-being. Instead they stress their richness in cultural identities, traditional knowledge, worldviews and the strength of their customary social and political institutions. This view underlines the multiple dimension of well-being underscoring the social and cultural aspects of life and the need for a fundamental change in the relationship between the state, international donor agencies and indigenous communities. Indigenous peoples contend that most conventional ‘development strategies’ have been designed in a top-down, paternalistic way and that culturally these fostered their assimilation into dominant western culture. Such programs have frequently overemphasized the material and economic aspects of development, while having a poor understanding of the social, political, economic and ecological context of indigenous communities. The result of such a conventional approach to development has been a significant transfer of financial resources to those areas populated by indigenous peoples without a demonstrable and sustainable impact on their well-being (Butz, et al. 1991) [5].
5. The fieldwork—the use of participatory methodologies
The main objective for using the ‘participatory’ research methods has been to provide indigenous peoples with a space to make their voices heard and to enable them to define their own vision of development. This methodology requires taking a more holistic approach to development and involves a switch in power relationships away from those who traditionally define the development priorities (government, outside donor agencies) to indigenous peoples themselves who directly experience in their daily lives the consequences of severe poverty and social exclusion.

The methodology used in the consultation included the following aspects: (i) Vision for the future: Rather than focus on past and current problems, indigenous peoples developed a vision of their own future; (ii) Participatory Action: Participation implies having power to participate in the decision-making process. The methodology aimed at establishing new power relations with outside entities, whereby indigenous people become the main agents of their own development and not mere subjects of external development policies; (iii) Creative Production: This concept calls for the capacity to think innovatively, to stimulate and apply artistic, creative power to the process of problem-solving and creating a new future; (iv) Motivational Attitudes: Approaches and techniques that excite and encourage people to participate and that offer help; (v) Critical Thinking: This element stresses the need for and capacity to look critically at oneself and one’s environment, and to understand the reality of a situation before trying to change it; and (vi) Life-force: In addition to the techniques which are purely based on reason and rational thought, this methodology also includes techniques to listen to people’s feelings—this acknowledges that emotions and feeling or affection and caring are part of what makes a decision or an effort sustainable.

6. An indigenous peoples’ perspective on human development and well-being
The following section describes the main findings of the participatory consultations with indigenous peoples. First, the paper will present a ‘list’ of the identified social or collective capabilities and second their priorities in terms of individual human capabilities. Hereby, indigenous peoples have also identified concrete steps necessary to enable them to expand those capabilities in order to improve their individual and collective well-being.

6.1 Social Capabilities
Based on the strong collective indigenous identity and worldview—indigenous peoples have placed a strong emphasis on the need to strengthen the social capabilities of their communities. The identified aspects of social capabilities include: (i) organizational capacity; (ii) environmental protection and adequate natural resource management, and (iii) the strengthening of indigenous cultural identity.

6.1.1 Strengthening indigenous organizations
Traditional indigenous structures, such as general assemblies, ayllus and councils of elders represent the center of community life for indigenous peoples. Thus, it can be said that the indigenous organizational structure represents the basis for community life since it is embedded on a collective decision making process and on the principle of consensus. This would in turn enhance indigenous peoples’ social capabilities to create their own vision of the future through an autonomous development process based on their own identity and worldview. Thus the recuperation and strengthening of traditional indigenous governance is given a high priority among indigenous communities, this being particularly the case among the indigenous peoples of the highlands.

6.1.2 Environmental protection and the adequate management of natural resources
Indigenous peoples have a close attachment to their land and environment, these being the basis for the economic, social and cultural aspects of their community life. Indigenous representatives expressed that securing land titles is central for their economic and socio-cultural existence. They highlighted the spiritual and religious significance of lands for their communities. In contrast to western thinking they do not view land exclusively as an economic “commodity”, which can be traded in the markets, however they consider a secure land base as essential for their economic existence and crucial for the preservation of their cultural identity. They view land as a “guarantee for the dignity, liberty, security and justice of their communities”. Indigenous peoples argued that in their own communal lands they have developed an effective strategy that protects the environment and ensures an environmentally sustainable resource management. They stressed concerns that within the international global system no international property rights exist for traditional indigenous knowledge. Indigenous representatives proposed the following steps to better ensure the process of an environmentally sustainable resource management:
1. to establish clear and succinct procedures that facilitate the process of indigenous land regularization;
2. to forge a concerted effort between the government, indigenous communities, multinational agencies and NGOs towards a program that establishes a series of Community Protected Areas on indigenous lands;
3. to promote capacity-building efforts in indigenous communities aiming at the protection and management of natural resources in a sustainable manner. This will be accomplished through the following:
   ▪ by initiating a joint effort between the government, indigenous communities, universities and research institutes in the design and implementation of regional environmental management plans that aim at protecting wild flora and fauna—these should be based on systematic environmental baseline studies; and
   ▪ by creating a forum for the exchange of experiences between indigenous communities that have experienced success in combining economic development with biodiversity conservation and the many other communities wanting to know more about the process.

6.1.3 Recognition and strengthening of indigenous cultural identity
Indigenous peoples expressed their vision of a “development with identity” which is based on the distinct cultural identities of each indigenous group. They feel that a shift in the mindset of society is necessary to achieve this goal. They stressed that it is fundamental for a successful indigenous development that civil society accepts the multi-ethnic and pluricultural nature of their societies. Indigenous peoples proposed to carry out a public awareness campaign through which the following two aspects are emphasized: i) indigenous culture is distinct from the majority of the population; and ii) the cultural richness of indigenous peoples should be highly valued, instead of continuing to “modernize” and thus undermine their world
views and cultural values. Indigenous peoples underscored the importance of the formal education system in the preservation and revitalization of indigenous cultures. Furthermore, they emphasized the important role that the media can play in supporting the expression of indigenous culture.

6.2 Human capabilities
In terms of individual human capabilities, indigenous peoples identified the following key dimensions to well-being: (i) political participation; (ii) indigenous rights; (iii) access to basic social services; and (iv) sustainable economic development.

6.2.1 Participation and leadership in national and regional political life
Indigenous representatives expressed the importance of equitable indigenous political participation in the political system at the local, regional and national level. Indigenous representatives emphasized that for centuries political life has been dominated by the urban elites and that indigenous peoples have suffered and continue to endure systematic political exclusion. Within the indigenous vision of the future an improved participation of indigenous leaders in the national political arena is key. In particular indigenous women face serious obstacles when attempting to participate in the political arena, due to their lack of formal education which is a direct result from past discrimination.

6.2.2 Indigenous Rights
The lack of a legal framework securing indigenous rights presents a severe obstacle for indigenous self-development. Indigenous communities have suffered from political instability and violence and have been repressed due to the lack of full recognition of their human rights. Specifically, indigenous representatives suggested an adequate legal framework for indigenous peoples, which can be achieved through the following:

1. To draft, in cooperation with indigenous communities, an “Indigenous Law” that ensures the establishment of a secure national legal framework for indigenous peoples;
2. To enforce a legal recognition of indigenous lands, territories and community managed protected areas, through a joint effort incorporating the government and indigenous communities. For this purpose indigenous leaders suggested to establishing a multisectorial commission that defines and implements the legal procedures of land regularization;
3. To implement mechanisms that guarantee full respect for indigenous human rights—such measures could include an awareness campaign about indigenous peoples rights addressing the prevailing prejudices against indigenous peoples;
4. To recognize and apply indigenous customary law; and
5. To guarantee the establishment of intellectual property rights for traditional indigenous knowledge.

6.2.3 Access to basic and social services
The main social indicators (such as illiteracy rate, access to health care, drinking water and sanitation) reveal that the living conditions of indigenous people are significantly worse than the ones for the non-indigenous population. In spite of the abysmal living conditions of indigenous peoples, many indigenous representatives expressed a positive outlook for the future. Their perspectives are frequently based on a long-term view of how to improve their living conditions, with a strong emphasis on the importance of education and the long-term development of indigenous communities. They expressed the need for a bilingual and intercultural education which fully incorporates the cultural and local realities of indigenous communities. On this subject, they expressed their preference for combining traditional knowledge with modern thinking. An important aspect of education and schooling is that it must be embedded in the cultural context of indigenous communities. Language plays a particularly key role as it is a major component of indigenous culture and self-identification. In order to achieve this goal, indigenous peoples propose to establish a scholarship program that enables more indigenous youth to attend universities and to pursue a professional career. In the short-run indigenous peoples suggested the following steps towards the improvement of their living conditions:

1. To include indigenous communities in the provision of basic government services by incorporating them in the design and implementation process. The participation of indigenous peoples should ensure that the provided services also reflect the local needs and priorities;
2. To set up a network between regional and national government, project executing agencies, local authorities and indigenous organizations to exchange information and to carry out public works in basic infrastructure projects such as related to energy and basic sanitation;
3. To establish National Intercultural Education Programs;
4. To acknowledge the important contribution of traditional medicine and to launch pilot projects combining modern health care services with traditional medicine;
5. To establish a health education program jointly between health professionals and indigenous women’s organizations to improve the health situation of indigenous women;
6. To initiate a Program for the “Prevention and Eradication of Alcoholism and Domestic Violence”. A focal point of this program should center on attempting to control the alcohol smuggling and illegal sale of alcohol to indigenous communities in the Amazon.

6.2.4 Sustainable economic development
Indigenous representatives expressed their frustrations about the severe socio-economic conditions they live in and the continuously high rates of poverty among indigenous communities. They highlighted that their economic, political and social exclusion in Peruvian society has led to the impoverishment of many communities. A major concern raised was the concentration of economic activity in the urban centers. Community leaders stressed that their communities do not have the same economic opportunity as the rest of society. They felt that their opportunities for economic development are very limited and that many government programs do not reach indigenous communities in the remote rural areas. A result from such inequalities and discrimination has been the continuously high number of migration by indigenous peoples to the urban centers.

Another problem mentioned is the market prejudice which must be endured—where indigenous goods lack a place in the market, an economic reality which is compounded with the high price level for many basic goods that they do not produce. Furthermore, the exploitation of indigenous labor is being considered by many indigenous peoples as unjust. In particular younger indigenous leaders underlined that the only way to overcome this systematic problem is by establishing indigenous enterprises. Specifically, indigenous
representatives suggested the following activities to improve their living conditions:

1. To set up an “National Indigenous Funds” Which exclusively promote social investment in indigenous communities. These funds should be designed and implemented jointly between the government, indigenous communities and NGOs.
2. To establish a public-private partnership between the private sector, the government, NGOs and indigenous organizations, in order to initiate regional development plans and coordinate specific economic development projects.
3. To promote the establishment of indigenous businesses; for this purpose it is suggested that a comprehensive training program for indigenous peoples in business and management skills be launched, thus enabling them to found and effectively run their own businesses.
4. To improve the economic opportunities for indigenous peoples in remote areas by enabling indigenous people to have access to modern technologies, such as for example modern telecommunication technologies, computers and online services.
5. To promote the development of alternative sources of income, such as for example community-based ecotourism, or indigenous handicrafts. These activities have to be based in the social structures of the communities and should be managed and controlled by indigenous communities.

Conclusions
The paper has shown the approach to deliberatively leaving open the capability-approach for different interpretations dependent on the local and cultural context as an important strength, rather than a weakness of the approach. The experience from the consultations process with indigenous peoples demonstrates that participatory processes can provide people with the freedom to define for themselves which human and social capabilities are most valuable to their development. The paper highlights that such an approach allows us to overcome the challenge of how to select a valuable list of capabilities. Instead of drawing up a universal list of capabilities it is possible to enable people to define their own priorities for their human development. At the same time, the research demonstrates that the capability approach has a strong bias towards human capabilities and views well-being primarily in individualistic terms. The application of the CA to indigenous peoples strongly suggests that the concept of social or collective capabilities needs to be further developed in order to adequately reflect the worldview and priorities of social groups with a diverse cultural background and identity, such as indigenous peoples.

References


23. Robeyns I. An unworkable idea or a promising alternative? Sen’s capability approach re-examined,’ Center for Economic Studies Discussion, Katholieke Universiteit Leuven. 2000, 00.30


32. Van Cott Donna Lee. (Edis.), Indigenous Peoples and Democracy in Latin America (New York: St. Martin’s Press, 1994.)