

by society and its members in the struggle for prosperity. Participation is a bottom up approach of individual engagement where communities have a proud ownership of their development through a total participative approach that is endowed in the traditional knowledge that is within them (endogenous). The individual make-up of a community influences who needs to be involved and what activities will be viewed as legitimate. Ensuring that different cultures and interests are respected and involved (in a meaningful way) is important. For example, respecting cultural traditions and religious holidays, being aware of different styles of communication and ensuring that persons with disabilities can participate fully are all ways that you can build credibility and support.

Bwalya (1985) avers that the convectional wisdom of local participation in development is that, first, it increases the quality and relevance of decisions: secondly, it increases the chances of success and mobilization: lastly, the above in turn tend to motivate a sense of self-reliance and wider efficient use of local resources.

The schema below depicts the inter-linkages in indigenous knowledge actors. Participation means the inclusion of the actors in the environment for effective contributions towards growth and sustainability. None has sufficient ground to stand without the other hence the snowball intertwining. Participation is effective when communities relate with all actors.

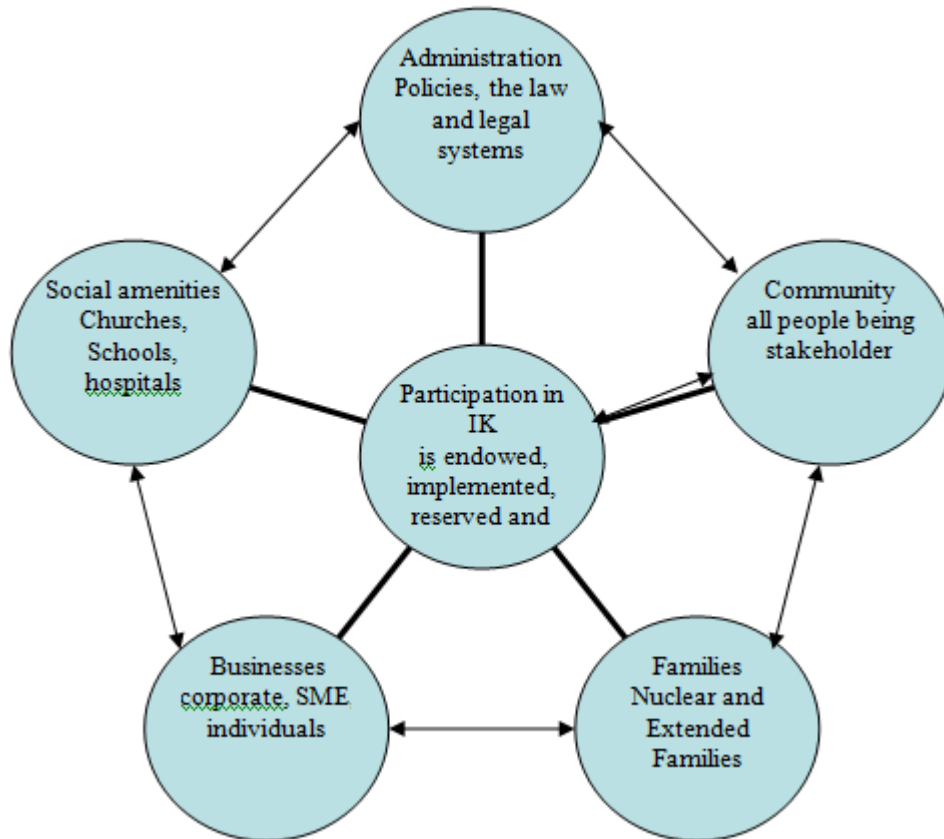


Figure 1.2: Participants in IK for socio-economic development in communities

7. Synergy

Synergy is the interaction of multiple elements in a system to produce an effect different from or greater than the sum of their individual effects. It is the total resource in terms of skills, individual knowledge, indigenous knowledge and an addition of international knowledge. In communities, rural, national or global, indigenous knowledge takes the centre stage. The integration of IK into the development process is essentially a process of exchange of information from one community to another. IK can be developed and stored across globally by:

- 1) **acknowledgement:** That IK is and should be acknowledged as part of cultural values and its methodologies should not be deemed as backward.
- 2) **Recognition:** This involves an assessment of IK's significance and relevance (to solving communal and cross-cultural issues).
- 3) **Reliability:** not being an accidental occurrence (how well does it work?), effectiveness and transferability;
- 4) **Storage** in retrievable repositories: Storage is not limited to text document or electronic format; it could include tapes, films, storytelling, gene banks, etc.
- 5) **Transfer:** This step goes beyond merely conveying the knowledge to the recipient; it also includes the testing of the knowledge in the new environment. It should be symbolic and ethnographic.
- 6) **Dissemination** to a wider community adds the developmental dimension to the exchange of knowledge and could promote a wider and deeper ripple impact of the knowledge transfer.

8. Indigenous Knowledge as a Technology

Gorjestani (2000) notes that indigenous knowledge is not confined to indigenous people alone. He advances that all communities have developed their own body of knowledge over generations. With this in mind, even the most developed nations have their cumulative indigenous knowledge that it is only them that can identify and understand. As part of technology for advancement and development, indigenous knowledge has remarkably been identified as a catalyst in the areas of rural universities where the communities own and hold fast that which is dear to them for sustainable development and improved standards of living by: Entrepreneurship to encourage savings, skill, business ideas; leadership which is tapping the potential in people; community participation which is people inclusion and initiatives; gender and inequality which recognizing the capacity in all.

Traditional methods of conveying information could be used in awareness campaign or in the participatory preparation of projects (MARECIK, 1998). Maasai elders illustrate ways of the past and thus values to the young tacitly through story telling. Mother tongue is used in introductory statement either by songs or themes which the community communally answers. The relationship between use of mother tongue and indigenous knowledge information passing is noticed as relevant. It is further noted that adult literacy increases when based on local languages and thus contributes to the cultural renewal of a minority ethnic group and with this approach they realize their worth and take up their position in development trajectories.

According to the above literature, IK is local, in that it is rooted in a particular community and situated within broader cultural traditions; it is a set of experiences generated by people living in those communities. Separating the technical from the non-technical, the rational from the non-rational could be problematic. Therefore, when transferred to other places, there is a potential risk of dislocating IK. It is tacit knowledge and, therefore, not easily modifiable. It is transmitted orally, or through imitation and demonstration. Codifying it may lead to the loss of some of its properties. It is experiential rather than theoretical knowledge. Experience and trial and error, tested in the rigorous laboratory of survival of local communities constantly reinforce IK. It learned through repetition, which is a defining characteristic of tradition even when new knowledge is added. Repetition aids in the retention and reinforcement of IK. This brings about the question on if native or local language is good enough support for indigenous knowledge. But how will it be store and reserved for generations and used by other communities.

Settee, (2008) notes that language is at the heart of first nations' culture and knowledge retention. Indigenous people, especially elders, believe that without language, we have lost culture and the essence of who we are. Kirkness (1998), recommends that communities must establish banks of knowledge to preserve the language.

9. Conclusion

This paper concludes by using the tent of Conway (1997) who observes that given time; everything that is old will become new again. In this regard indigenous knowledge is an essential element in the development process and the livelihoods of many local communities. The challenge lies in how to reconcile IK and modern science without substituting each other. No living community is absolutely poor, every community has resources. A resource is any good or service that is relatively scarce and relatively useful. Indigenous knowledge is one aspect of a resource. IK is a social fabric that can positively be used to control issues of ethnicity and especially in Kenya where tribal clashes are known to erupt. IK is used for peace and conflict management in communities. It is inherent in microfinance support. Such knowledge and understanding of the original issues that appear thorny all the time would bring to an end the troubled and perceived enmity in the ethnic groups. When such issues are resolved, then development issues are easily agreed upon and enforceable without one community having to refer to another as an adversary. Indigenous knowledge is developed and adapted continuously to gradually changing environments and passed down from generation to generation and closely interwoven with people's cultural values. Indigenous knowledge is also the social capital of the poor, their main asset to invest in the struggle for survival, to produce food, to provide for shelter or to achieve control of their own lives. Though Kenya is a little advanced in using IK in its development policies (devolution) a few other countries in Africa are similarly engaged such as South Africa, Cameroun, Tanzania, and Ghana. Areas of more scrutiny should be how IK can be transferred from one community to another without having to get a resource person to interpret the meaning as some cardinal facts are lost in the process. Yet, every community has its own IK that cannot be easily put into pen and paper; it is more observable and more participatory.

Challenges of reserving and preserving still exist. However, for as long the generation of mankind exist, and the willpower to cascade the knowledge to the next level generation exists, and an interest of the upcoming generation exists, IK could overcome the storage challenges of the time.

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