

An Assessment of Community's Perceptions of IK Based Handicrafts in Amathole District Municipality, South Africa

Raphael Mudemba, Amon Taruvinga, and L. Zhou

Abstract—The use of Indigenous Knowledge (IK) based skills and technologies in the rural livelihood activities have been practiced for ages. However, there are fears that rapid modernization is driving deprecation of such retro technologies in society. Thus, studying communities' perceptions of IK based technologies in off-farm livelihoods activities could be conducive to further development and poverty alleviation in rural communities. The use of Indigenous Knowledge-based technologies and skills in crafts activities is a major livelihood contributor to rural households in South Africa. The present study employed a cross-sectional survey of 300 households in Amathole District Municipality of South Africa to assess communities' perceptions of the use of IK based technologies in handicrafts making. Results indicate a strong regard for Indigenous Knowledge-based technologies and skills in off-farm livelihood strategies and environmental management. We, therefore, urge for a policy framework that recognizes and promote the use of such tacit knowledge in alleviating poverty and food insecurities in rural areas.

Index Terms—Indigenous Knowledge, technologies, rural livelihoods, handicrafts, food security.

I. INTRODUCTION

The role and relevance of Indigenous Knowledge (IK) in the rural development spectrum can never be overstated [1]. It is widely believed that Indigenous Knowledge (IK) based technologies and innovations play a key role in rural livelihoods strategies both on-farm and off-farm [2], [3]. Voluminous studies have pointed out the use of IK based technologies and innovations in handicrafts activities, which are an important source of off-farm cash income in rural areas in the developing world [4]-[7]. However, despite the significant role that IK based technologies play in rural livelihoods strategies it is strongly believed that there is a general deprecation of Indigenous Knowledge-based technologies and skills due to modernization [3], [8]. Furthermore, traditional handicrafts (IK based) are also said to be facing extinction due to modern technologies and industrialization [9]. Despite the aforementioned emerging thinking asserts that IK based crafts still forms a crucial part of rural household's off-farm income [6]. In most instances, income from off-farm activities such as handicrafts is more

than income from land-based activities like farming [10]. Thus far, the present study seeks to assess communities' perceptions of IK based crafts as a sustainable rural livelihood source.

II. PROBLEM STATEMENT

Rural agriculture, once the mainstay and source of livelihoods for rural communities has been reported to be on the decline in the Eastern Cape province especially in the villages along the Wild Coast [11]. This has led to higher levels of poverty and food insecurity especially among rural women. However, decline in farming activities has led to deagrarianisation and forest revegetation in the province [11]. Indigenous Knowledge based skills and technologies have always governed and sustained rural livelihood strategies [2]. Despite the aforementioned modern technologies are said to be taking over exposing the only social capital of the vulnerable rural poor which is their Indigenous Knowledge. It is against this background that this study seeks to assess communities' perceptions on the use of such technologies in crafts.

III. OBJECTIVES

The present paper's main objective was to assess the perceptions of IK based crafts in the Amathole District Municipality of the Eastern Cape Province, South Africa. To achieve this the study set out the following specific objectives: - To assess main livelihoods strategies pursued by the respondents.

To assess the community's perceptions of IK based skills and technologies in livelihoods strategies (income source, cultural and social value) and environmental conservation.

IV. LITERATURE REVIEW

A. Communities' Perceptions of IK Based Crafts

Several studies have pointed out contrasting perceptions of IK based crafts in communities [12]. Both positive and negative perceptions are recorded in literature. Nevertheless, it is paramount to understand perceptions in different geopolitical regions since such might be influencing perceptions.

B. Negative Perceptions of IK Based Crafts

A general negative regard of IK based crafts is recorded

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in literature especially in Southern Africa [12]. The use Indigenous Knowledge (IK) based technologies in crafts making are regarded as a livelihood strategy of the poor and illiterate members of society [6], [12]. In the modern era, such skills and products are deemed primitive and not relevant in today's era [9]. Reyes-Garcia [8] asserted that many people are ditching their IK based skills and technologies due to modernization.

C. Positive Perceptions of IK based Crafts

Indigenous Knowledge (IK) based crafts are positively perceived by communities and are regarded as a sustainable source of timely cash income [2], [6], [12]. It is also regarded as way of preserving cultural, traditional values and identity [13]. Other studies also argue that, Indigenous Knowledge based skills and technologies and their application in crafts leads to preserving of the environment and natural resources [14].

Mixed reporting therefore dominates literature in as far as society's perceptions of IK based crafts is concerned worth exploring for purposes of guiding policy and investments.

V. METHODOLOGY

The study was carried out in Amathole District Municipality of the Eastern Cape Province, South Africa. A cross-sectional survey across the whole district municipality which spanned from the period between: July 2016 to July 2017 was conducted. Primary data were collected through a combination of a structured questionnaire, focus group discussions with key stakeholders and key informant interviews. The study covered all the areas across the district municipality where IK based handicrafts were being practiced. The Amathole District Municipality was chosen due to its rich Indigenous Knowledge (IK) use in livelihood activities especially in handicrafts making. Using purposive sampling a survey was conducted on 300 households from the 5 local municipalities within the district municipality. The selection criteria for the survey population were to target both registered IK based crafters households (the database was provided by the responsible authority) and non-crafters households within the vicinity of crafters.

VI. STUDY AREA

- 1) The Amathole District Municipality is located in the Eastern Cape province of South Africa. The Eastern Cape Province is one of the nine provinces in South Africa regarded as the poorest province in the country. Amathole District Municipality is one of the six district municipalities in the Eastern Cape Province. The population of Amathole was estimated to be around 1.7 million [15]. With 52% of the population being women and 48% being males. The estimated number of household was under 300,000 with the majority of them being female headed [16]. It is estimated that around 54% of the population lives under the poverty datum line [16]. Furthermore, there are high levels of unemployment and 66% depend on social welfare grants for sustenance [16].

The main economic activities in the region are tourism, oceanic activities and agriculture. However, there has been a sharp decline in the number of households engaged in on-farm activities [11]; hence the reliance on off-farm activities mainly IK based crafts [6].

VII. RESULTS AND DISCUSSION

This section presents study results in-line with set objectives. Socio-economic profile of respondents was presented first followed by an assessment of the livelihood strategies of the surveyed population and the assessment of their perceptions of IK based crafts.

A. Socioeconomic Profile of the Surveyed Population

The socioeconomic profile of the respondents is summarized below:

- Around 240 respondents (80%) were household heads and or were coming from a female-headed household.
- The majority of the respondents were literate with around 210 respondents (70%) reported having attained at least primary level of education and the remaining 30% reported having no formal education and could not read or write.
- Around 255 respondents (85%) were beneficiaries of social welfare grants and were not formally employed.

B. Livelihood Strategies

Results reveal that, the main livelihood activities among rural households from the study area are off-farm activities. Of the respondents, 285 (95%) alluded that they were not practicing any on-farm livelihood activities. Most households rely on harvesting Non-Timber Forestry Products (NFTP), which they use to make traditional crafts for the tourism market. The majority of crafters employ localized Indigenous Knowledge-based skills and technology to make crafts.

C. Communities' Perceptions of IK Based Crafts as a Nonfarm Livelihood Source

The following section presents descriptive results of shared perceptions of IK based crafts from the study area. Respondents' perceptions on different aspects of crafts activities were assessed and analysed in order to give a general overview. General perceptions on the following aspects; income source perceptions, cultural values perceptions, social status perceptions and environmental degradation perceptions were assessed.

D. Internal Consistency

Researchers use the Cronbach's Alpha to determine reliability when working with tests or scales. Cronbach's Alpha measures internal consistency and is expressed as a number between 0 and 1. An acceptable value for the Cronbach's Alpha is between 0.7 and 1 [17]. Accordingly, since this study used a Likert scale to assess perceptions it is necessary to check the internal consistency first before any meaningful analysis can be done to ensure validity [17].

Table I shows the Cronbach's Alpha for attitudes towards IK based crafts as a source of income, cultural values preservation tool, social status and environmental degradation perceptions. In Table 1 the Cronbach's Alpha coefficient for

perceptions of IK based crafts as an income source, cultural values preservation tool, and social status perceptions are 0.822, 0.929 and 0.859 respectively. The coefficients for the above perceptions are all above 0.7 thus making them acceptable as a good reliability tool.

TABLE I: CRONBACH'S ALPHA FOR PERCEPTIONS TOWARDS IK BASED CRAFTS

Perceptions	Cronbach's Alpha	N of items
1) Income source	0.822	4
2) Cultural values	0.929	4
3) Social status	0.859	6
4) Environmental degradation	0.636	3

However, for the environmental degradation perception, a coefficient of 0.636 was recorded which is slightly below 0.7 thus making it a less reliable tool. This might be due to the fact that there is a poor correlation between the items asked or the number of questions asked was few (environmental degradation perceptions) such that they are not able to clearly outline the perceptions of the respondents. Caution should, therefore, be exercised when interpreting these results.

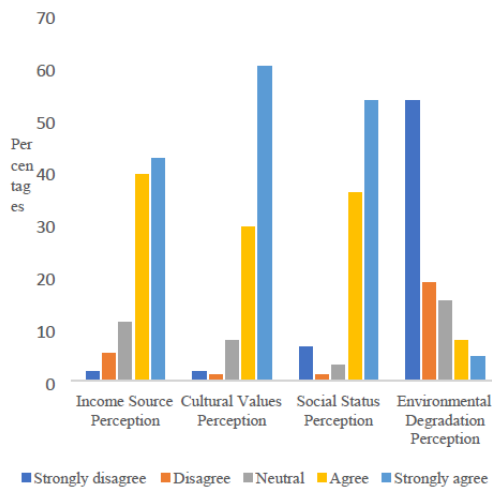


Fig. 1. Shared perceptions of IK based crafts from the study area.

Fig. 1 illustrate that 42% of respondents strongly agreed that IK based crafts are an important source of sustainable household income. Results further indicate that 39% agreed that IK based skills and technologies are a source of sustainable income. Only a mere 2% and 5% strongly disagreed and disagreed respectively that IK based skills are a sustainable source of income, with 11% of the interviewed being neutral towards the contribution of IK based skills in crafts to household income.

Thus, it can be noted that the majority (82%) of respondents had a positive perception of IK based skills and technologies in crafts as a sustainable source of income. This can be attributed to the positive contribution of IK based crafts to household cash income in rural communities. These findings mirror observations by Adam and Shackleton [6],

who posited that traditional crafts making was regarded as a lucrative source of household cash income. The generally positive attitude towards IK based crafts making as a rural source of income may be targeted towards promoting adoption of such retro technologies in rural areas.

Results also indicate that 89% of the respondents strongly felt that traditional crafts play a crucial part in communicating and preserving cultural values. Only a mere 3% of the respondents disagreed and 8% were neutral. This suggests that traditional crafts making is still highly regarded in the study area due to the use of crafts in traditional ceremonies. Similar comparable observations were made by Nettleton [13], who asserted that crafts making in Southern Africa are regarded as a way of preserving and communicating one's cultural values. Culture as societal norms and values play a significant role in uniting people to confront rural development challenges as a united front borrowing from their past experiences and tacit knowledge. These findings reinforce the importance of IK based crafts in preserving and promoting local communities' cultural values worth targeting.

As indicated in Fig. 1 above, 53% of the sampled population strongly agree that IK based crafts making enhance one's social status in the community. A further 36% agree to the aforementioned, resulting in 89% of the sampled population denoting a positive attitude towards IK based crafts making's social standing in society. Results further indicate that a mere 8% showed a negative attitude towards traditional crafts. This shows that IK based crafts making is a highly regarded enterprise in communities where unemployment levels are high and low economic opportunities as a way of uplifting communities' social status. To the contrary, these findings contradict Matsenjwa [12] who highlighted that IK based crafts were negatively viewed in Swaziland and were associated with poor uneducated women. However, Abisuga-Oyekunle [18] pointed out that IK based crafts making as an enterprise were highly regarded in society. Thus far, where IK based crafts are positively perceived, they may be targeted as a developmental strategy aimed at improving communities' social status in marginal areas dominated with high levels of unemployment and low economic activities.

Fig. 1 further highlight that 72% of the respondents disagreed with the notion that crafts destroy the environment. Only 13% of the sampled population was of the view that crafts destroy the environment and the remaining 15% were neutral. These findings reveal that harvesting of natural resources for crafts making is regarded positively. This can be a result of good indigenous knowledge-based environmental management skills being evident in society. Similar comparable findings can be noted which argued that harvesting of natural resources for crafts making do not lead to environmental degradation [14]. This is further supported by Chudasri [4] who stated that in today's age of environmental unfriendly mass production of goods, traditional crafts are an environmentally friendly and sustainable source of income for the poor. These findings suggest that promotion of IK based crafts may trigger sustainable harvesting and community conservation of natural resources within their jurisdiction. This may be explained by creation of positive specie preservation value as a result of IK

based crafts.

VIII. CONCLUSION

The Amathole community has shown positive regards towards the use of Indigenous Knowledge-based technologies and skills in livelihoods activities; in these context handicrafts. Based on perceptions of respondents, results conclude that IK based crafts activities support the three pillars of sustainable development – economic, environmental and social sustainability. These findings suggest that by promoting IK based craft activities; rural development agencies are likely to promote the economic and social standing of rural households as well as environmental conservation. The more rural households share these positive perceptions the more they are likely to adopt IK based crafts. Thus far, promotion of these positive perceptions may be targeted to enhance adoption.

Policy Insights

The following policy insights are suggested from the study findings:

If IK based crafts are positively perceived (income source, promotion of culture and social status) this is likely to create a ‘positive specie preservation value’ for rural natural resources (used in craft making). This means in the eyes of local community natural resources must be preserved for they generate positive direct benefits.

If IK based crafts are negatively perceived this is likely to create a ‘negative specie preservation value’ for rural natural resources (used in crafts making). This means in the eyes of local community; natural resources are not worth preserving for they don’t directly benefit from them.

Understanding location based communities’ perceptions of IK based crafts may be critical in formulating rural development and natural resources conservation strategies as highlighted above.

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