Multidimensional Index of Good Living of the Indigenous Community of San Andres de Bocay, Nicaragua

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Abstract

The community of San Andres de Bocay, is located at 248 meters above sea level, latitude 14° 19’ 30” N and longitude 85° 10’ 50” W, is located on the Coco River 470 kilometers from Managua, 350 families live there with Miskitos 3,000 inhabitants, they are probably descendants of the Chibcha from South America, 6000 years ago. The study was conducted with the aim of building a multidimensional index of good living in the community, research into three stages: collection, fieldwork and writing the scientific paper. Three variables were used; characteristics affecting the Good Life, elements that affect the worldview and human needs. In social characteristics, education is regular in 90%, health 71% and they have no basic services. The economic structure is based on agriculture, without financing. The Miskito culture is closely interconnected with the elements of nature turning these into condition for its social, economic and cultural existence. The social organization is simple about the relationship retains values of love of family, water, environment, language and land. They believe that the Good Life is achieved by the social cohesion of the community and the daily range of basic needs. The highest score to build the index of the Good Life Community abstained human needs: identity, livelihood, security, autonomy, participation, satisfaction, utilities, education, health, living standards, environment, good governance, justice and technically they established four columns, Be, Have, Do and Be.

Introduction

The present study has a qualitative approach; it was conducted in order to build a multidimensional index of the Good Life of the indigenous community of San Andres de Bocay, in Nicaragua with the vision of replying in all indigenous communities of Miskito spoken. It is a problem of socio-economic nature with the scope of achieving Good Living measure community based on human needs described by the inhabitants.
Nicaragua there is a need to measure the Good Life of indigenous communities from the characteristics, elements that affect the worldview and human needs of the Miskito indigenous. A chronological review of existing indicators and indices was performed to measure the development and well-being of societies, to finally submit a proposal with a view to measuring the Good Life of the Miskito community.

The models were consulted indexes: Growth and development, physical quality of life, social welfare, sustainable development, human scale development, human development, basic skills, planetary happiness and the experiences on this subject with Latin American countries mainly south, Ecuador with the SumakKawsay and Bolivia with the Suma Qamàña have, were analyzed.

A multidimensional index is proposed for measuring the Good Life of the indigenous community of San Andres de Bocay with the possibility of replication in other similar communities of Nicaragua; it consists of 13 needs reported by the inhabitants and 4 tributes as defined (Neef, 1994).

Methodology

This research was conducted in three stages: information compilation, fieldwork and writing the scientific paper. Three main variables were evaluated; characteristics affecting the Good Life, the elements that affect the worldview and human needs, based on human needs a matrix which includes thirteen rows was made; identity, livelihood, security, autonomy, participation, satisfaction, utilities, education, health, living standards, environment, good governance, justice and four columns; Be, Have, Do and Be, as they were described by (Neef, 1994).

According to the established method (Barrantes, 2008) “Qualitative research postulates a phenomenological conception, inductive, process-oriented, seeks to address or generate theories. Their analyzes are not necessarily translated into mathematical terms” was used.

The universe was the community of San Andres de Bocay with 350 families, 3000 inhabitants, a sample of 25 individual interviews, two focus groups with ten government officials and survey took fifty householders. The selection criteria for applying the survey were: being head of the family, local and institutional community leader. Fisher’s formula was used to obtain a sample of the community.

\[
\frac{Z^2 \times p \times q \times N}{(N^* e^2) + (Z \times p \times q)} \quad Z=1.37 \quad N=3,000 \quad p \times q=0.5 \times 0.5 \quad e=8\% \quad n=50
\]

Techniques and instruments

Review of records, and field trip visits by community leaders were interviewed, two focus groups and survey.

The citizen participation was voluntary and three central questions were asked: What are the characteristics that influence the Good Life, elements that affect the worldview and what are the main most important needs in the community?

The information obtained was analyzed, sorted, processed and placed in the results.
Results and Discussion

1. Social, economic, cultural characteristics that influence the Good Life

Social characteristics

The State promotes the Nicaraguan National Education Plan in order to guide changes in the educational system; meet the challenges of overcoming poverty, strengthen modernization of the State and contribute to the achievement of sustainable development (MINED, 2012). The results of focus group discussions conducted in November 2014 in the community show that 490 children are enrolled in pre-school, 876 in primary, 355 secondary and 338 in adult education, retention is 80% and the illiteracy rate 27%. A survey conducted in 2014 revealed that 90% of indigenous believe that education is regular, 6% is good and 4% bad and they are taught only in Spanish.

Health policy is to return the right of Nicaraguans, a healthy environment, through preventive health and receive free integral services, suited to the multi-ethnic, cultural, religious and social realities of the country (MINSA, 2010). The community has a health center, according to Doctor Nelson Mejía -Director of the center-; a thousand people are attended monthly; in the opinion poll 70% of the population believes that health care is regular, 16% good and 14% bad.

Table 1. Opinions of the respondents in relation to Education

<table>
<thead>
<tr>
<th>Respondents Ages</th>
<th>Good</th>
<th>Regular</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 - 70</td>
<td>2</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>50 - 60</td>
<td>1</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>40 - 50</td>
<td>11</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>45</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2. Opinions of respondents in relation to the care of their relatives in the Health Center

<table>
<thead>
<tr>
<th>Respondents Ages</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 - 50</td>
<td>9</td>
<td>32</td>
<td>6</td>
<td>47</td>
</tr>
<tr>
<td>40 - 20</td>
<td>7</td>
<td>38</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Total en %</td>
<td>16</td>
<td>70</td>
<td>14</td>
<td>100</td>
</tr>
</tbody>
</table>
According (UNICEF, 2000) basic social services represent the essential components where human development is founded. In the indigenous community of San Andres de Bocay, there are no basic services due to lack of infrastructure.

**Economic Characteristics**

In this sense (CP Kottak, 2003) explains that an economy is a system of production, distribution and consumption of resources.

The economic situation of the community of San Andres de Bocay, is represented by subsistence agriculture as the main economic activity, 90% of the workforce is engaged in this primary activity. Industrial activity is limited to woodwork. 4% is dedicated to the activity for gold search and 6% to other daily activities.

According to the census of properties in the community, 95% of families own land for growing basic products, the form of ownership is communal and inherited from generation to generation (Castillo, 2014).

The land and natural resources are the basis of the economy, the lack of this resource is a factor of inequality and poverty; each head of household on average has 50 acres of land; based on the Miskito worldview he produces for subsistence; the survey reveals that 75% of production is for family consumption and 25% for trade.

According to the survey reveals that family income is between $ 100 to $ 150 a month, in a household of six people two of them work, that is the average obtained, income range between $ 200 and $ 300 per household; if that amount is divided among the six members who live in an indigenous household average, income per person would be 1.1 to $ 1.7 per day; allowing a glimpse of the existing socio-economic and poverty problems in the community.

**Cultural Characteristics**

The category of culture is defined, as the centerpiece of where the other categories that explain the Good Living focused on the Miskito community that according to (Geertz, C., 1991), in the book “Interpretación de las Culturas” (Interpretation of Cultures) outlines the following: man is an animal suspended in webs of significance he himself has spun, I believe that culture is that
warp, and the analysis of culture must be therefore, not an experimental science in search of law but a science interpretative in search of meaning.

In the Mexico Declaration on Cultural Policies (UNESCO, 1982) he declared that culture gives man the ability to reflect on it. Through it, man expresses himself, becomes aware of him, and recognizes his incompleteness, questions his own achievements, seeks untiringly for new meanings and creates works that transcend him.

The Miskito culture is closely interconnected with the elements of nature, indeed the natural environment is a condition of its social, cultural and economic existence. Land, water, mountain, family, hunting and agriculture are inseparable and inalienable rights that are part of their way of life and cultural existence. This behavior in the Miskito can be considered as a popular culture so (Fiske, 1989) calls “the meanings I produce a text are nice when I feel they are my meanings and that they relate to my daily life of a direct practical way “.

2. Elements that influence the worldview of the inhabitants of the indigenous community

Organizational element

Before colonization the Miskito had a simple social organization around the relationship, living in small communities and are characterized as warriors, hunters, fishermen, and water and highlands lovers. These forms of organization are kept at present, although new product aspects of transcultural and external influence were introduced; currently his organization is based on its own territorial government, community, judges and council of elders who are a moral authority.

Environmental element

According to (Heim, 2012), these people have maintained a harmonious relationship with the environment. Part of this special relationship is derived from the Miskito legends that enable transmit knowledge about the connection between the physical world and the spiritual world. Nature and natural resources understand with each other in the worldview as part of a big whole, as spiritual being. Therefore, they have traditionally treated nature with respect and have not exploited natural resources, not to risk the imbalance in this relationship. This relationship is maintained between the Miskito and nature, they leave the community and go into in the mountains, and they return to the community with livelihoods.

Water and land elements

According to (Heim, 2012), the Miskito for generations, cultivate the land but just enough for the family livelihood and thus no resources of mother earth would be wasted. Once harvested, the land is returned to nature for regeneration and takes from 15 to 20 years to replant on the same plot, thus, according to the worldview the earth will not be mistreated.

From the great myths of origin and from subsistence activities to their sense of well-being, pleasure, leisure and love, the Miskito people trace their relationship with life in inseparable form of water and earth. According to the census of existing properties in the community 95% of families own land to cultivate, the form of ownership is communal and are inherited from generation to generation (Castillo, 2014).

Land and natural resources are the basis of the economy and food security, the lack of this resource is to be a factor of inequity and poverty; each head of household on average has fifty acres of land.
Transcultural element

The Miskito people have gone through the process of transcultural, lived since colonial times but still has its own set of values such as love of the water and the environment, family and land affection, respect for ancestors, language, among others; this agrees with that indicated by the (UNESCO, 1982), in point one of the World Declaration on Cultural Policies, Mexico City, July 26, 1982 that stated: “Every culture represents a unique and irreplaceable values as traditions and forms of expression of each people that are its most effective means of being present in the world. “

Happiness

94% of respondents believe that happiness is related to water resources, land, and environment, maintenance of their forms of organization, family affection and achieving the satisfaction of basic needs.

Table 3. Extension of family properties in the community

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Number of acres per family</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From 20 to 50 acres</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>From 50 to 100 acres</td>
<td>44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Denomination</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>63</td>
<td>26</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Water</td>
<td>72</td>
<td>21</td>
<td>6</td>
<td>1</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Environment</td>
<td>40</td>
<td>53</td>
<td>4</td>
<td>3</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Family</td>
<td>94</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Organization</td>
<td>38</td>
<td>25</td>
<td>26</td>
<td>9</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Opinions</td>
<td>307</td>
<td>129</td>
<td>44</td>
<td>16</td>
<td>4</td>
<td>500</td>
</tr>
<tr>
<td>% rating</td>
<td>61.4</td>
<td>25.8</td>
<td>8.8</td>
<td>3.2</td>
<td>0.8</td>
<td>100</td>
</tr>
</tbody>
</table>

Good living

In germinating development alternatives (Gudynas, 2011) highlights the ideas of (Acosta, 2008) who said that the idea of the good life is defined as: An “opportunity” and an option to “build”, it cannot be reduced to “welfare Western” and should be supported in the worldview of indigenous peoples where what might be called social improvement as a “permanent category construction and reproduction”. Material goods are not the only determinants, but there are others in the matter: knowledge, social and cultural recognition, codes of ethical conduct and even spiritual in relation to society and nature, human values, vision the future, etc.

For the Miskito community of San Andres de Bocay, Good Living is the social cohesion of the community through the ancient culture, preservation of land for production, education in their language, respect for the environment, family values, the collective sense of ownership, development, consolidation and maintenance of basic human needs.

3. Index Proposal for Good Living Nicaraguan Indigenous Community (IGLNIC)

This aspect aims to achieve a measure of subjective well-being from the Good Life, inquiring about the internal states of individuals in relation to their perception about their own lives, it is
about retrospective self-reports of widespread satisfaction or happiness or concerning a specific domain with life. Pretending with this, first, show what people mean by Good Living, and second, visible differences between different indigenous groups.

The (IGLNIC) is alternative based on the experiences of the indexes analyzed and the reality of the world view of the people of the community. It is highly correlated with other indicators and indices, specifically with the information used to measure progress towards the different Millennium Development Goals agreed internationally in 2000 and also with IHR.

A matrix that includes thirteen rows that basic human needs are defined: identity, livelihood, safety and security, autonomy, participation, satisfaction, utilities, education, health, living standards, environment, good governance and justice; and four columns: be, have, do, and be, to the way they were described by (Neef, 1994). Annexed.

Being refers to personal or collective attributes; have are the rules, institutions, legal mechanisms; making concerns about personal and collective actions as verbs and being refers to locations, spaces and environments.

The matrix is applied to groups of people through dynamic type meeting for the time necessary, to finally have a comprehensive analysis of perception of reality of the community, indigenous geographical area or region. The matrix relates needs, satisfactions and assets dynamically. Matrix positive is the proposal to which you want to reach the aspired model: it is what you want to be. The negative matrix is to face the situation: it is what you are. This model can be replicated experiences at local, regional and national levels in an approach to the study and understanding of Good Living Nicaraguan indigenous.

The Government should play a hegemonic role in the implementation of this model from local areas, but with ability to cover the entire national territory.

Conclusions

1. The community has an economic structure based on subsistence agriculture, industry is marginal, livestock is scarce, the tertiary activity is depressed and funding is lacking.

2. 90% of indigenous believes that education is fair, 6% considers it good, 4% think it is poor, 70% of the population believes that health care is fair, 16% considers it good and 14% rate it as poor. There is no infrastructure for services.

3. The Miskito culture is closely interconnected with the elements of nature, the natural environment is a condition of its social, cultural and economic existence. The social organization is simple about the relationship, living in small communities; the authorities are territorial government, community, judges and council of elders. The land and natural resources are the basis of the economy and the lack of this resource is to be a factor of inequality and poverty. It retains its own set of values such as love of water and the environment, family and land affection, respect for their ancestors, language and others. They believe that Good Life is achieved by social cohesion of the community, respect for their culture, language, land, water, environmental conservation and sustainable achievement of basic needs.

4. The proposed from the community, subjective well-being index measured from Good Life explores internal states of individuals in relation to the perception of his own life.

5. The index is constructed from a matrix which includes thirteen rows that are basic human
needs: identity, livelihood, safety and security, autonomy, participation, satisfaction, utilities, education, health, living standards, environment, good government, justice and four columns: be, have, do and be.

**Annexes**

**Index Proposal for Good Living Nicaraguan Indigenous Community (IGLNIC)**

*(On next page)*

**References**


Romero, L. A. (2014), *Entrevista sobre necesidades básicas de la comunidad indígena de SAB.*

<table>
<thead>
<tr>
<th>HUMAN NEEDS</th>
<th>TO BE</th>
<th>TO HAVE</th>
<th>TO DO</th>
<th>TO BE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>Relevance, self-esteem and personality</td>
<td>Symbols, language and values</td>
<td>Compromise, integrate, define, know and grow</td>
<td>Act according to their culture</td>
</tr>
<tr>
<td>Subsistence</td>
<td>Stable, physical and mental health</td>
<td>Work and home</td>
<td>Feed, clothe and procreate</td>
<td>More or less stable environment</td>
</tr>
<tr>
<td>Security</td>
<td>Tranquility, balance, solidarity and reciprocity</td>
<td>Family, law and rights</td>
<td>Participate, cooperate, assist, prevention, care, monitor and defend</td>
<td>Secure and stable environment for the community</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Freedom, rebellion and tolerance</td>
<td>Equal rights and obligations</td>
<td>Participate, opine, disagree, opt and risk</td>
<td>Plasticity, space and pride</td>
</tr>
<tr>
<td>Participation</td>
<td>Rights, problems and solutions.</td>
<td>Participate and solve problems</td>
<td>Opine, participate and disagree</td>
<td>Environment, stable organization</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Belief, passion, will and humor</td>
<td>Friends and education</td>
<td>Express emotions and feelings</td>
<td>Complete happiness</td>
</tr>
<tr>
<td>Basic services</td>
<td>Better life, peace, joy and happiness</td>
<td>Electricity, water and telephone infrastructure</td>
<td>Build.</td>
<td>Good living</td>
</tr>
<tr>
<td>Education</td>
<td>Educated in culture, language and values</td>
<td>Education, Culture and Sports</td>
<td>Participate.</td>
<td>Educated person values</td>
</tr>
<tr>
<td>Health</td>
<td>Health and self-esteem</td>
<td>Right to health</td>
<td>Caring.</td>
<td>Physical and mental wellbeing</td>
</tr>
<tr>
<td>Standard of living</td>
<td>Individual and group welfare</td>
<td>Cooperation, relationships and opportunities</td>
<td>Work, produce and market</td>
<td>Good living</td>
</tr>
<tr>
<td>Environment</td>
<td>Human existence</td>
<td>Water, land and air</td>
<td>Care and planning</td>
<td>Security for future-generations</td>
</tr>
<tr>
<td>Goodgovernance</td>
<td>Respect, autonomy and support.</td>
<td>Social programs</td>
<td>Promote, welfare and favor</td>
<td>Social peace</td>
</tr>
<tr>
<td>Justice</td>
<td>Respect and obedience to the laws</td>
<td>Approval of justice</td>
<td>Educate, respect and obey</td>
<td>Community peace and harmony</td>
</tr>
</tbody>
</table>

**TO BE**: personal or collective attributes (nouns).

**TO HAVE**: records institutions, norms, mechanisms, tools, laws.

**TO DO**: recorded personal or collective actions that can be expressed as verbs.

**TO BE**: register spaces and environments.