

Rapid Needs Assessment in Digkilaan, Philippines

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ABSTRACT

Digkilaan is one of the hinterland barangays in a highly urbanized city of Iligan, a lone district under Lanao del Norte located in the Northern part of Mindanao. It has an area of 1,246.85 hectares. Agriculture-based production of rice, corn, banana, root crops and copra are the main sources of income of the barangay. In order to advance and foster community development, Barangay Digkilaan plans to make the most of the town's rich environmental resources and local heritage. However, there is limited information accessible about the community's natural, physical, and social resources. Hence, this study used Rapid Rural Assessment by employing its tools/techniques; community mapping, livelihood matrix ranking, & seasonal analysis. A set of Focus Group Discussions (FGD) and Key Informant Interviews were also conducted. The findings of FGD revealed that sewing generates the highest revenue for women. This is a result of the high demand for togas during graduation, the high demand for uniforms during the start of school, and other factors like curtains. Additionally, renting out these products can bring in extra money. The third quarter of the year has the biggest demand for women's labor in terms of the women labor pattern, mostly because it coincides with the start of the school year when there is a high demand for school uniforms and a corresponding high demand for seamstresses. But when it comes to men's income, pag niyog or pag lubi come in first. The participants claimed that Barangay Digkilaan has a large number of coconut trees. In order to provide for their family's living expenses, they gather coconut from a coconut palm once a month, earning an estimated average revenue of thirty four thousand (Php34,000.00) per quarter. Furthermore, there are available markets in Iligan City for their harvested coconuts like GRANEX, GCT Coconut Trading, Immaculate Cocoline Industries, and more. These results were confirmed through KII. Detailed data of these resources play an important role in identifying and developing Digkilaan community's local talents, skills, and products, and use this to help the local economy to generate employment opportunities and protect the environment. Hence, the rural rapid appraisal was carried out to know the resources available within its frontierland to assist the local government unit in identifying and developing local products that will maximize their resources to promote and enhance their community.

Keywords: Barangay Digkilaan, Community Mapping, Livelihood matrix ranking, RapidRural Assessment, Seasonal Analysis

INTRODUCTION

Digkilaan is one of the hinterland barangays in a highly urbanized city of Iligan, a lone district under Lanao del Norte located in the Northern part of Mindanao. Digkilaan had 5,208 households, divided into 1,216 homes, or an average of 4.28 people per household, according to the 2015 Census.

The barangay's main sources of income come from the production of copra, rice, corn, bananas, and other agricultural products including root crops. Most of the local residents are engaging in farming as their primary source of living while some others engage in animal husbandry and livelihood projects from the government as their other source of income. Last March 2022, Brgy. Digkilaan is the First Barangay FITS Center established in Iligan City. More farmers in Barangay Digkilaan will now have access to agriculture-related information and technology that could help increase their farm productivity and enhance their agricultural practices.

Barangay Digkilaan intends to maximize the town's abundant natural resources and cultural heritage in order to progress and foster community development. The ecological, physical, and social riches of the community, however, are not commonly recognised due to limited information accessible.

LITERATURE REVIEW

According to Zanetell & Knuth (2010)^[1], RRA techniques are frequently employed by academics and professionals to ensure a representative, accurate, and economical representation of wealth ranks among rural residents. RRA offers a huge range of applications. It was initially employed as a tool in rural development initiatives in developing nations. It was employed mostly in agricultural ecosystems and for agricultural purposes. studies, social forestry irrigation projects, and sociological methods (Kiper et.al., 2010) ^[2]. It is crucial in projects involving rural tourism in particular to be aware of all socioeconomic circumstances, viewpoints, and attitudes of stakeholders, most probably from the community, and to get their support.

Consequently, starting a project without giving it any thought conditions of the area or to a behavior that would influence their socioeconomic and behavioral patterns could result in more unfavorable outcomes. This viewpoint suggests that in all endeavors, taking into account and establishing the local community's priorities acting as process participants would result in protectionist and more active sustainability measures. Rural development initiatives likewise, ought to be consistent with cultural norms and values. This methodology was created in order to involve more local perspectives in the project's planning, execution, and evaluation phases. Projects are less likely to succeed without local input. Many studies have supported this. When they are not involved in planning and implementation, people do not feel strongly about a project. Additionally, local communities frequently possess expertise that is crucial for success. To solve particular issues, blueprint strategies can be created. But it's always crucial and necessary to adapt to the environment. Only by utilizing local knowledge .

RESEARCH METHOD

This study used Rapid Rural Assessment by employing its tools/techniques; **community mapping, livelihood matrix ranking, & seasonal analysis**. A set of Focus Group Discussions (FGD) and Key Informant Interviews were also conducted. The general objective of the assessment is to identify the resources available in Barangay Digkilaan through rapid rural appraisal to assist the local government unit in

identifying and developing local products that will maximize their resources to promote and enhance their community. In the process of the assessment, the following categories of resources should be addressed:

1. *Land*. This covers the natural and physical resources below and above the land (examples: water, timber, oil, mountains, crops).
2. *Community resources*. Refers to the asset in a community that helps meet the certain needs of individuals (examples: places or structures available like public parks, ponds, church, market, school, etc.).
3. *Products/Services*. Goods and services produced or available in the municipality.
4. *Labor*. Refers to people involved in producing goods and services (example: carpenters, farmers, drivers, any workers).
5. *Seasonal Information*. Seasonal variations in labor demand, weather, crops pattern, and supply of the existing products and services.

There were 40 participants in the focus group discussions. 63% of them are women while 37% are men. Moreover, the team selected 4 key informants; 1 from barangay council, 2 from women's association, 1 from banana chips association.

RESULTS/ DISCUSSION

Community Mapping

Selected participants produced a map depicting the natural and physical resources and community resources in the Barangay.



Figure 1. Physical and Community Resources of Barangay Digkilaan

Based on the FGD, it was found out that households have varieties of fruits in their gardens/backyards for personal consumption such as, Lanzones, Rambutan and Mais for personal consumption. The Dodiongan Falls is located in Dodiongan (a purok the Barangay). There is also production of lagundi capsule and other herbal meds located in Green Village. Additionally, the only place in Digkilaan with a mobile network signal is at the riprap on Red Cross Village.

There are 3 mosques in the whole Barangay: Prk Malaigang 5, Prk Centro and Prk Danao. In Purok Tingcob, Purok 5 - Tingcob, these are the community assets, bamboo, house with Store, no Pharmacy but there is a household who is selling medicines, residents in this purok normally work in the construction industry not offices. There are 93 households residing in Purok. There is a commercial swimming pool – Sayana Swimming pool. Some of its crops are the following: Lubi, bamboo, falcata, durian, lansones, mais, saging, hardware, rambutan. There is also a catholic chapel in the community. In Purok Malaigang there is a quarry and wastewater treatment. In Purok Danao there is a spring. In Purok Ladi A and Ladi B, there is a coffee plantation.

Livelihood Matrix Ranking

The group will rank the main products and services produced in the Barangay in terms of skills, income, labor requirement, availability of loans, and who are more involved in the production of the product.

Table 2. Livelihood Matrix Ranking (Women)

Criteria	Product A (Panana hi. Sewing)	Product B (Banana Chips)	Product C (Babuyan)	Product D (Manokan)	Product E (Street Food)	Product F (Carinderial/ Eatery)	Product G (Sari-Sari Store)
Daily Wage/Income	<i>Rank 1</i>	<i>Rank 5</i>	<i>Rank 2</i>	<i>Rank 7</i>	<i>Rank 6</i>	<i>Rank 3</i>	<i>Rank 4</i>
Labor Requirement	<i>Rank 1</i>	<i>Rank 7</i>	<i>Rank 4</i>	<i>Rank 6</i>	<i>Rank 5</i>	<i>Rank 2</i>	<i>Rank 3</i>
Skills requirement	<i>Rank 1</i>	<i>Rank 7</i>	<i>Rank 2</i>	<i>Rank 3</i>	<i>Rank 6</i>	<i>Rank 4</i>	<i>Rank 5</i>
Availability of loans	<i>Same ranking for all</i>						
Woman	<i>Rank 6</i>	<i>Rank 7</i>	<i>Rank 1</i>	<i>Rank 2</i>	<i>Rank 4</i>	<i>Rank 3</i>	<i>Rank 5</i>

Among the stated products and services in Brgy, sewing has the greatest daily wage and income, giving women the highest income. This is a result of the strong demand for togas during graduation, for uniforms during the start of the school year, and for other items like curtains. Additionally, renting out these products can generate additional revenue. One of the women who has a sewing machine said she'd like to learn how to make the little rags that the young boys outside Gaisano Mall sell.

However, Poultry is ranked last. This is a result of operating a poultry business's high capital expenditures (feeds) and low profits (not all chickens lay eggs). It was "hasol," or too much hassle, according to the women.

Additionally, when it comes to labor requirements, sewing comes in first. Sewing on the hook and eye, cutting, buttoning, and other related tasks require seamstresses. Banana chips take the least amount of labor because they may be made with just one person. The women interviewed said that in terms of availing a loan for a business, the products/services listed above are equal in ranking since the loans that are availed are not specific for a certain product/service but rather the loans available are personal loans which the recipient can allocate for any business she wants. The loans available to those women in Brgy. Digkilaan are from the following: Serviamos – a member can avail personal loan, Life Bank, Pag-asa and Araw2x are microfinance loans which require weekly repayment,.Cooperative members can also avail of personal loan.

Moreover, for men, Piggery requires the highest requirement for male laborers. The lowest in rank is Banana chips. Also, almost everyone was engaged in farming, but this was mostly for their own consumption and not for generating income. Banana, coconut, corn, and fruits are a few examples of their produce. They are only tenants because the land on which they planted does not belong to them. Another person said it would be wonderful if there was training for producing rice and rearing goats. One of the women mentioned that there had previously been training, but it had been far too long ago.

Table 3. Livelihood Matrix Ranking (Men)

Criteria	Product A (Lubi)	Product B (Saging)	Product C (Mails)	Product D (Gardening/Vegetables)	Product E (Mangga)	Product F (Humay)	Product G (Kahoy)	Product H (Kape)
Daily Wage/Income	Rank1	Rank3	Rank2	Rank4	Rank7	Rank5	Rank6	Rank8
Labor Requirement	Rank1	Rank3	Rank2	Rank8	Rank7	Rank4	Rank6	Rank5
Skills requirement	Rank5	Rank2	Rank4	Rank1	Rank6	Rank3	Rank8	Rank7
Availability of loans	Rank6	Rank5	Rank1	Rank4	Rank7	Rank2	Rank8	Rank3
Men/Women	80% men 20% women	90% men 10% women	100% men	50% men 50% women	100% men	100% men	100% men	100% men

Daily Wage/Income

First, out of the eight (8) livelihood sources mentioned by the participants, *pag niniyog* or *pag lubi* ranks first with regard to income. The participants asserted that there were numerous coconut trees in Barangay Digkilaan. Accordingly, they harvest coconut every month from a coconut palm, which yields them enough income for their family survival as they earn an estimated average income of thirty four thousand (Php34,000.00) quarterly. In addition, there are available markets in Iligan City for their harvested coconuts like GRANEX, GCT Coconut Trading, Immaculate Cocoline Industries, and more.

The second source of livelihood marked by the participants, which yields them income is *Mais farming*. According to them, mais can take about three months to harvest and yields an estimated income of at least twenty thousand pesos (Php20,000.00) quarterly or at least eighty thousand pesos (Php 80,000.00) annually. *Saging (saba)* planting is the third source of livelihood that provides income for Digkilaan residents. Accordingly, the participants can earn at least fifteen thousand pesos (Php15,000.00) during harvesting (about 3 months).

Gardening (e.g vegetables) is the fourth livelihood that gives income among participants. The participants have stretched that gardening is a usual stuff for both men and women. Although the market is a problem in gardening, participants have emphasized that harvested gardens are for their consumption, which is a very good option for food needs. The fifth livelihood which participants can yield an income is *humay or rice* planting, mostly upland. The participants highlighted that planted palay takes about five (5) months to be harvested. However, participants have mentioned that fertilizer is a problem in growing *palay*; hence, they have a minimal volume of harvest.

The sixth livelihood mentioned by the participants is planting *kahoy*, mostly palkata. Accordingly, it takes them nine years (9 yrs.) to harvest kahoy, but income is lucrative (average of Php100,000.00 per harvest). For them, planting kahoy is an alternative source of livelihood since it takes a long time to harvest. The seventh ranked livelihood is planting *mangga*. The male participants stretched that it takes them four to five months from flowering to ripen. Like *kahoy*, planting *mangga* is an alternative livelihood among male farmers. Some of the participants have argued that they often experience failure because they have no pesticides to take care of and protect flowers from insecticides. The last livelihood mentioned is planting *kape*. In fact, only two (2) of the interviewed male participants have *kape* plantation because it also takes a long time to be harvested.

Labor requirement

First, *Lubi or niyog* requires more labor requirements as mentioned by the participants. Among the mentioned labor requirements include tigsaka, tighakot, tighatod, tiglugit, tigbunot, etc. All works are being done manually; hence they suggested that since it is their primary source of livelihood, help from the government and other organizations are needed. Second, *Mais* farming is the second livelihood that requires more labor requirements. The participants have mentioned that their family members, neighbors, and friends are helping them during planting and even during harvesting. Sometimes, they hired helpers to do the planting and harvesting.

Third, *Saging* also requires more labor requirements as marked by the participants during the focus group discussion. Accordingly, growing saging is sensitive as it needs maintenance, both manual labor and fertilizers/pesticides. Tigtapas, tiglimpyo, tigmarket are some of the mentioned labor requirements. Fourth, *Humay* is the fourth. According to the participants, they need people to help them prepare the field. One of the participants claimed that he has no carabao to plow the field. They insisted that they could have better and productive farming if only

the government can provide at least one tractor, which the farmers can share the use of. Fifth, sixth and seventh. *Kape, kahoy, and mangga* farming is the fifth, sixth, and seventh livelihood that also needs labor requirements. They need workers to help with the maintenance of these kinds of farming. Eighth. The livelihood that requires least labor requirements is *gardening*. The participants argued that this livelihood can be done by family members in their house's backyard.

Skills requirement

With regard to skills requirement, the participants believed that based on their experience, *gardening* requires skills because they need to be careful positioning the plants with the sunlight direction. Preparing seeds, containers, and even transplanting requires skill. Planting *saging or saba* is the next as it also needs skills in applying manures and fertilizers so with planting *humay* and *mais*. Planting *niyog, mangga, kape, and kahoy* requires the minimal skills as these can be planted and taken for granted until it bears fruits.

Availability of loans

The interviewed participants have clarified that none of them had applied for a loan to finance any of the enumerated livelihood. The participants asserted that if they can get a loan, they would prioritize applying for *mais, humay, kape, gardening, saging, niyog, mangga, and kahoy* respectively. They further suggested that MSU-IIT hopefully would initiate sourcing out potential organizations to provide loans among farmers so that they can improve their income from the enumerated livelihoods.

Men/Women

When the participants were asked who engages in the enumerated livelihood, the participants marked that *mangga, humay, kahoy, and kape* planting are performed by men (100%). On the other hand, *gardening* is shared by both men and women (50% respectively). There was also minimal women participation on *saging* (90% men and 10% women) and *lubi* (80% men and 20% women) planting.













The FGD facilitators have concluded the interview by soliciting suggested projects that may be implemented by the project's proponents. The participants have made mention of raising *baboy* for Christians and *kambing* for Muslims. They also suggested the potentiality of fishpond farming. Accordingly, there is a lake/pond in the Muslims dominated purok that can be improved for fish farming. They also suggested being lent with Carabao to help them in the *mais* and *palay* farming.

Seasonal Analysis

The participants were tasked to do the seasonal analysis to document the seasonal labor patterns of women including their income. The crop pattern was included despite not being mentioned in the livelihood matrix because women still participate in farming mainly for home consumption. In doing the seasonal analysis, the participants were asked to put four (4) dots for the quarter or months where the labor demand for women is the highest and one (1) dot for months where the labor demand for women is less. The same instruction applies for the income and crop patterns.

Table 4. Seasonal labor pattern of women, Brgy. Digkilaan, Iligan City, Philippines, 2022

	1 ST Quart er (Jan-March)	2 nd Quart er (April-June)	3 rd Quarter (July - September)	4 th Quarte r (October- November)

Labor Pattern of Women				
Income Pattern				
Crop Pattern				

As presented in Table 1.3.1, in terms of the women labor pattern, the highest labor demand for women falls in the 3rd quarter mainly because it captures the opening of classes where there is a high demand for school uniforms, hence a high demand for seamstresses in the area. This was followed by the 2nd quarter wherein it captures the closing of classes. Thus, demand for graduation toga in the 2nd quarter is high, hence creating extra demand for Seamstress. In addition, women also take part in the farming though not considered as their source of income, but it is during this quarter that there is a high demand for women to also engage in farming as “tig-lampas”, “tig-copras”, and “tig-harvest”. Participants put only two (2) dots in the 4th quarter mainly because it is the rice harvest season wherein, they can participate and consider it as their side hustle. While a low labor demand for women in the 1st quarter of the year is attributed to the planting season where only a few hands are needed and also the big spending effect during holidays causes less demand for workers in the 1st quarter of new year.

In terms of the income pattern, the participants identified the 4th quarter as the period of great abundance in the form of money. This is attributed to “Christmas gifts” and “Bonuses” that they expect to receive in addition to their monthly income. This was followed by the 2nd quarter due to “toga rentals” and “harvests”. While it is during the 3rd and 1st quarter of the year by which women have smaller income.

As to the crop pattern, this was included despite not considering it as the main source of living for women because this helps address some of their families’ basic needs. Some of the crops they have mentioned are the following: rice, corn, squash, banana, rambutan, mango, and avocado. Based on the results, the participants opted to put equal dots on each quarter because most of these crops are grown in more than one season. The participants mentioned in the discussion that it is the men of Digkilaan that considers farming as the main source of income.

For the weather pattern as to when is the dry and wet season in the area was also asked from the participants. But it was not presented in Table 1 because the participants believed that climate change has altered the weather pattern, specifically the expected months for the dry and rainy season. In addition, the participants mentioned that some crops such as banana, coconut, and rice can grow regardless of the weather seasons.

Table 5. Seasonal labor pattern of Men, Brgy. Digkilaan, Iligan City, Philippines, 2022

	1 ST Quart er(Jan- March)	2 nd Quart er(April-June)	3 rd Quarter (July -September)	4 th Quart er(October- November)
Labor Pattern of Men	OOOO	OOO	OO	O
Income Pattern	O	OOO	OOOO	OO
Crop Pattern	O	OOO	OO	OOOO

As presented in Table 1.3.2, in terms of the men labor pattern, the highest labor demand for men falls in the 1st quarter. While a low labor demand for Men in the 4th quarter of the year. In terms of the income pattern, the highest income pattern falls in the 3rd quarter of the year. While the low income pattern for men falls in the 1st quarter. Moreover, the highest crop pattern falls in the 4th quarter while low crop pattern falls in the 1st quarter of the year.

CONCLUSION

One of the objectives of this study is to engage with the local community in Digkilaan and identify products and resources through Rapid Rural Appraisal. As a result of conducting RRA, it was found out that women in the barangay generate the most income from sewing. This is a result of various things, such as curtains, as well as the high demand for togas during graduation and the high need for uniforms at the beginning of the school year. Additionally, renting out these items can generate additional revenue. However for men, However, pag niyog or pag lubi take the lead in terms of men's income. According to the participants, there are a lot of coconut trees in Barangay Digkilaan. They collect coconut from a coconut palm once a month to help pay for their family's living needs. Therefore, given the vast potential area, it is essential to assess the community's agricultural resources and build some agricultural projects that would considerably aid in the creation of jobs and the growth of businesses.

REFERENCES

- Kiper, T., Korkut, A., & Yilmaz, E. (2011). Determination of rural tourism strategies by rapid rural assessment technique: The case of Tekirdağ Province, Şarköy County. *Journal of Food, Agriculture and Environment*. 9.
- Zanetell B.A., & Knuth B.A. (2002) Knowledge Partnerships: Rapid Rural Appraisal's Role in Catalyzing Community-Based Management Venezuela, *Society & Natural Resources*, 15:9, 805-825.