Best Practices of NGP: A Discourse of Sustainable Use of Resources and Its Community Development Contributions

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Abstract

The paper delves into the discussion of the National Greening Program (NGP) at Barangay Gata, San Agustin, Surigao del Sur for 2017 as perceived by the implementors and farmers-beneficiaries. It used mainly the descriptive-survey method, and there were two groups of respondents: the implementor, and farmers-beneficiaries. On the other hand, other research strategies were used like qualitative interviews, observation & FGD. The study revealed that NGP is a very effective measure for reforestation, an effective tool for poverty alleviation, & an excellent mechanism to answer climate change.

Keywords: NGP, DENR, Barangay, Gata, PO's.

Introduction:

Across the world, climate change had been felt and it resulted in tidal surges due to the destruction of mangrove forests. It is for this reason that reforestation both in the coastal mangrove forest and upland forest would be a very effective tool in forest restoration.

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The upland forest ecosystem in the Philippines is one of the sustainable natural resources. It is also vital in maintaining the balance of ecology or biodiversity as Tayo (2005) writes:

> "The role of forest in ecology is vital to the biosphere in that forest buffer temperature changes and stabilize humidity thus, preventing climatic extremes. Deforestation removes the root system protection for said and water. The results are runoffs and floods which led to soil erosion and landslides."

A bold forest will automatically have a decline in its oxygen supply. The clearing of forests continues at an alarming rate (Benjamin, Tangonan, & Ruadap, 2019).

The dwindling forest covers made countries in the world engage in social forestry programs. The forest cover of the Philippines is also dwindling, the Philippine Government in particular issued Executive Order No. 26 which engaged and mandated the implementation of the National Greening Program (NGP). Thus, Executive Order No. 26 was signed on February 24, 2011, by President Benigno S. Aquino III serves as the legal basis for the implementation of NGP. Executive No. 193, s. 2015 expands its coverage from 2016 to 2028 (NGP, 2018; 2022).

NGP is primarily a reforestation program that seeks to bring back the vegetative cover of the country's upland areas. The program is designed in such a manner as to achieve more-beyond reforestation to wit: poverty reduction, food security, environmental stability, biodiversity conservation, climate change mitigation, and adaptation (NGP, 2022)

Further, President Benigno S. Aquino signed Executive Order No. 26, 2011, which declared the implementation of the National Greening Program (NGP) as a government priority. To pursue sustainable development for poverty reduction, food security, biodiversity conservation, and climate change mitigation and adaptation. The National Greening Program shall plant 1.5 billion trees covering 1.5 million hectares for a period of six (6) years from 2011 to 2016 following land of public domain (DENR Administrative Order No. 3 of 2017, 2017).

Peoples Organizations (PO's) involvement in a government project is vital for its success and village participation. If the project is people-based, the community will have a very collaborative involvement as manifested in the NGP. As one anti-poverty measure, it provided livelihood or cash assistance to the farmer-beneficiaries. The aim to protect and conserve biodiversity was achieved due to effective Peoples Organizations' (PO's) involvement.

Sharma (2015) discussed that to address the complexity of environmental issues, environmental policymaking is evolving to transcend, compartmentalized approaches by becoming more integrated and cross-sectoral. The National Greening Program (NGP) aims to address the destruction of forest areas but it is also very unique, for it has a livelihood component which is to provide additional income, it provided to the farmers' recipients. Hence, it transcends from a social forestry program to economic and livelihood intervention for the farmer-beneficiary.

Statement of the Problem:

The study covers the following inquiry:

i.   What is the perception of the farmer-respondent on the effectiveness of NGP in the following aspects?

- Selection of seedlings;
- Improving the livelihood of the farmer-respondent;

- Support of farmers' organizations;
- Contribution to improving farming skills of the farmers;
- Maintenance;
- Sustainability of the project;
- Capability building of the implementers and farmers.

ii.   What is the perception of the farmers and implementers on the values integration of NGP?
iii.   What is the perception of the farmers and implementers on the cooperation of the villagers in NGP?
iv.   What is the extent of implementation of the operation of NGP?
v.   What is the extent of implementation of monitoring of NGP?
vi.   What is the extent of acceptance of NGP by the community?
vii.   What is the perception of the respondents regarding the adequacy of funding of NGP?
viii.   What is the extent of the implementation of NGP?

Materials and Methods:

The study used the descriptive-survey method using a standardized survey questionnaire as the main tool (NGP, 2022). Before the administration of the questionnaire, a permit was secured from the OIC CENRO of the Lianga Campus. The study was conducted at Barangay Gata, municipality of San Agustin, Surigao del Sur from January 2017 to October 2017. The statistical treatments used were Sample Percentage and Frequency, and Weighted Mean.
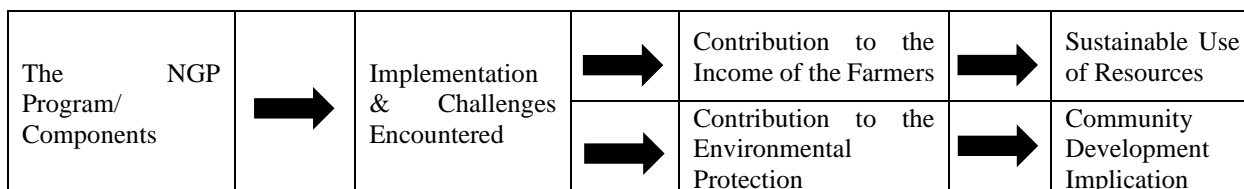
| The NGP Program/ Components | → | Implementation & Challenges Encountered | → | Contribution to the Income of the Farmers | → | Sustainable Use of Resources |
| | | | → | Contribution to the Environmental Protection | → | Community Development Implication |

Table 1: Schematic Diagram of the Study

Results and Discussion:

The followings are the results and discussion of the study:

Table 2: Distribution of the perception of the farmers if DENR provided good seedlings for NGP (N = 180)

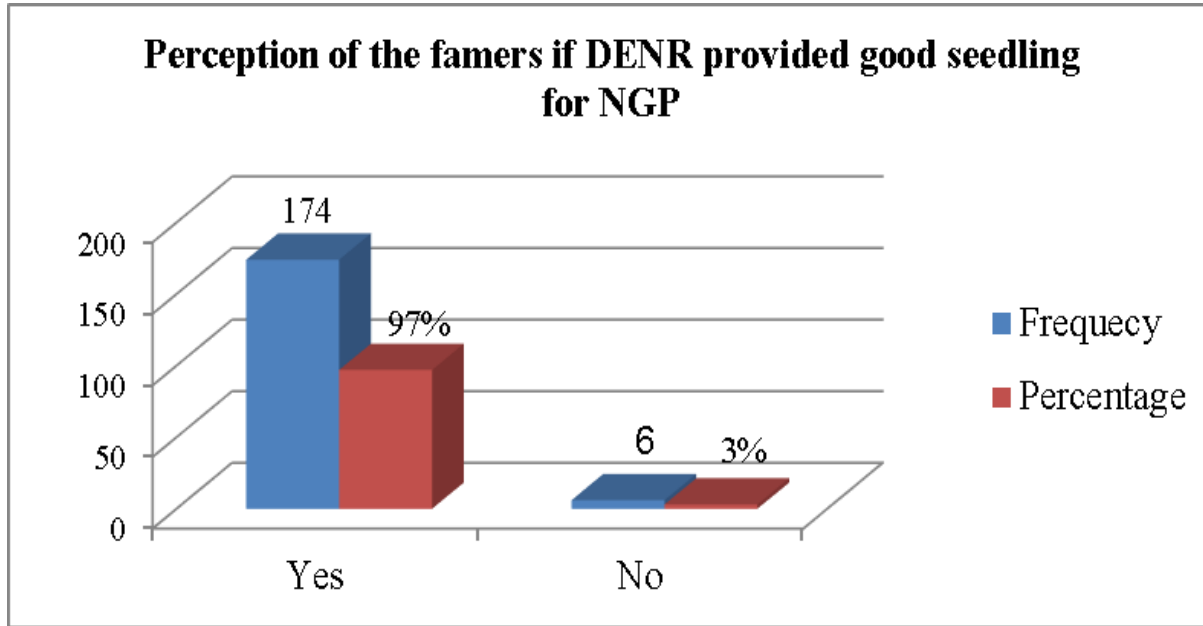| Perception if DENR provided the proper/exact seedling	Frequency	Percentage
Yes	174	97%
No	6	3%
Total	**180**	**100%**

Figure 2: Perception of the farmers if DENR provided good seedlings for NGP

Table 2 reveals the distribution of the perception of the respondents if DENR (Department of Environment and Natural Resources) provided good seedlings. Further, the table shows that 174 or 97% of the respondents declared "Yes", DENR provided good seedlings. Another 6 or 3% of the respondents perceived that DENR provided seedlings of not good quality, again as perceived by the respondents. It can be deduced from the findings that most or 97% of the respondents perceived that DENR provided a very good seedling. This resulted in good growth of the seedling and very little mortality of the seedlings.

Table 3: Distribution of the Perception of NGP if it improved the livelihood of the farmers (N = 180)

Perception of NGP if it improved the livelihood of the farmers	Frequency	Percentage
Yes	176	98%
No	4	2%
Total	**180**	**100%**

Table 3 reveals that 176 or 98% of the respondents declared that NGP improved the livelihood of the farmers. While 4 or 2% perceived that the NGP does not improve their livelihood or income. It can be deduced from the table that 98% of the respondents perceived that NGP improves their livelihood. Due to the additional income, it provides to the farmer-beneficiary and it can increase their income and have improved their purchasing power or increase their money in purchasing goods and services. And had a great impact on the socio-economic contribution of the farmer-beneficiary.
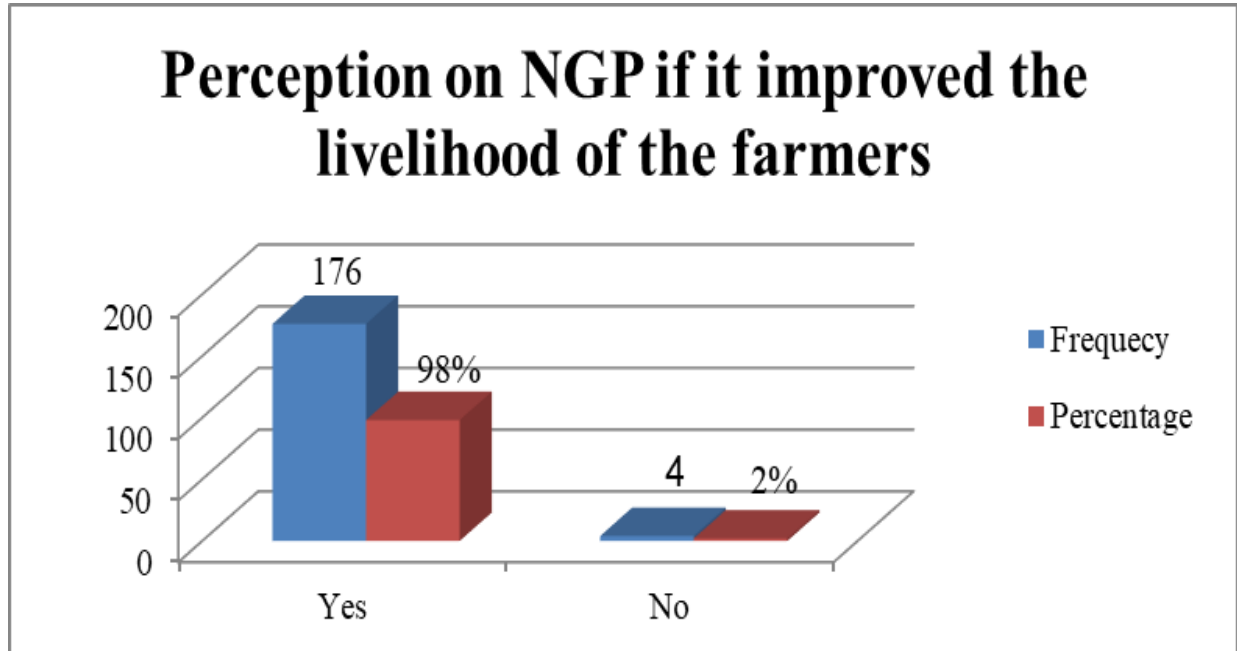
Figure 2: Perception of NGP if it improved the livelihood of farmers

Table 4: Distribution of the change of income after being a recipient of NGP (N = 180)

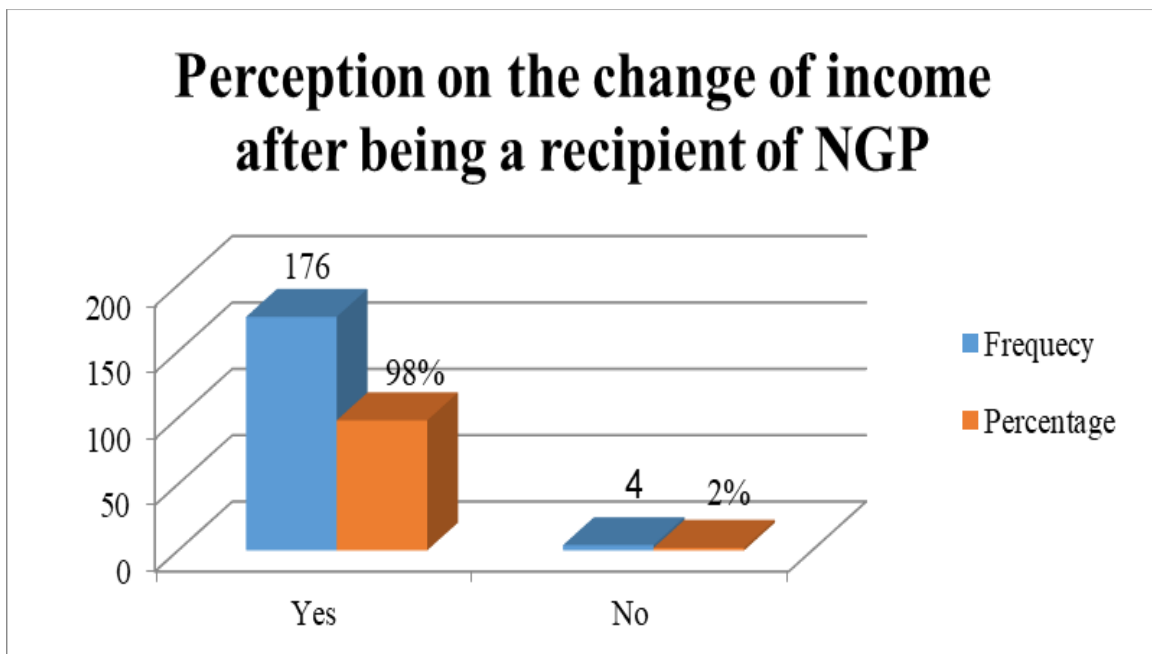| Is there changes in your income after you received the project?	Frequency	Percentage
Yes	176	98%
No	4	2%
Total	**180**	**100%**

Figure 3: Recipients of NGP

Table 4 reveals that 176 or 98% that recipient improve their income. 4 or 2% that being recipient declares that it does not improve their income. Moreover, this is only a minimal percentage. It can be deduced from the table that the NGP was able to increase the income of the farmer beneficiary and also provided a very good source of livelihood or additional source of income. Thus, achieve the aim of NGP that is to increase the income of the farmer-beneficiary.

Table 5: Distribution of the Perception if there is a need to continue the NGP program after the end of the project (N = 180)

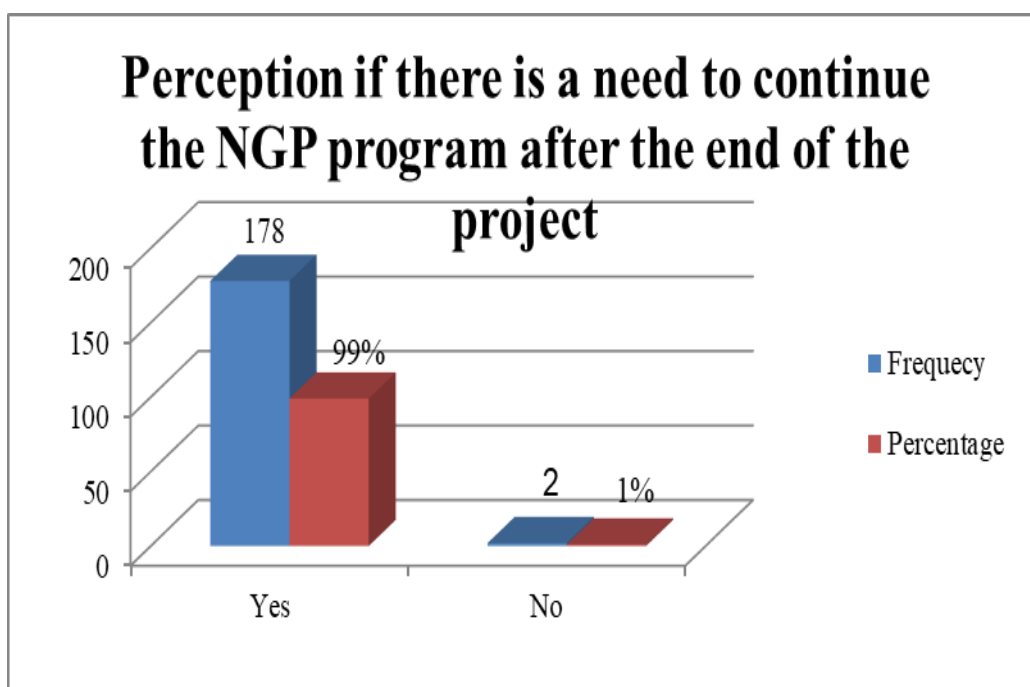| Perception to continue the NGP Program	Frequency	Percentage
Yes	178	99%
No	2	1%
Total	**180**	**100%**

Figure 4: Perception of a need to continue the NGP program after the end of the project

Table 5 reveals the perception of the respondents when they are asked if NGP as a program of DENR will be continued. 178 or 99% of the respondents declared that they wanted or wish the program (NGP) will be continued. 2 or 1% of the respondents declared that they do not want the program to be continued. Further, most of the respondents (99%) wish that the program will be continued, for it improves their livelihood or provided an additional source of income. On the other hand, the farmer-respondent recommended that the NGP will be continued for it promotes the values of village cooperation, village gregariousness, or village oneness. And NGP has empowered the community to be responsible as a recipient of the project.

Table 6: Distribution of the support of the farmers to NGP (N = 180)

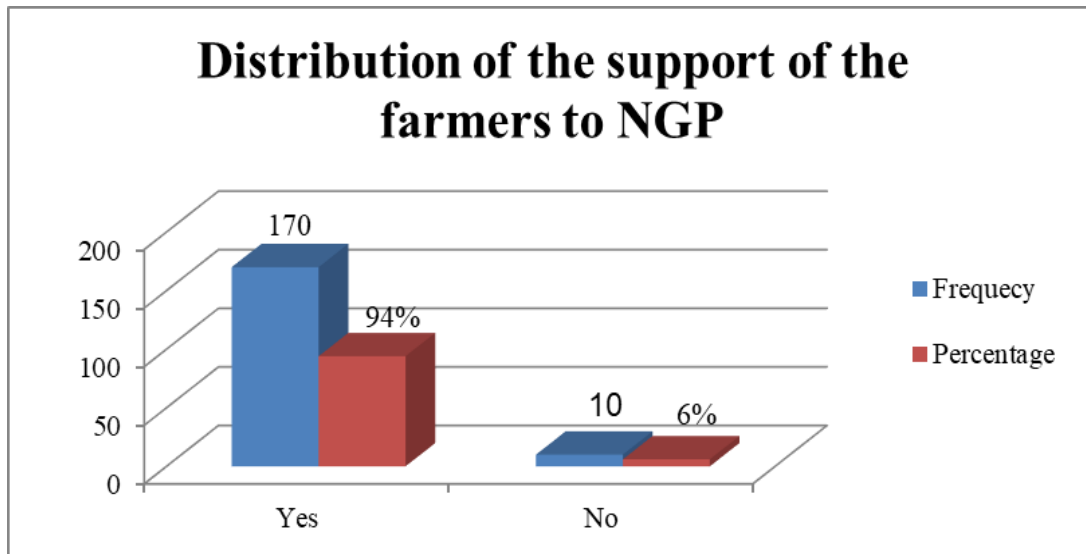| Do your farmers' organizations welcome and support NGP Program?	Frequency	Percentage
Yes	170	94%
No	10	6%
Total	**180**	**100%**

Figure 5: Distribution of the support of the farmers to NGP

Table 6 revealed the attitude of the farmers in welcoming NGP. 170 or 94% of the respondents declared that their farmer organization welcomes the NGP. While only 10 or 6% of the respondents declared that they did not welcome NGP. Moreover, only 10 or 6% of the respondents or very minimal of the respondents declared that they did not welcome the NGP. But, they are a minimal percentage only and have not affected the very good perception of more than the majority of the respondents.

Table 7: Distribution of the farmers' organization participation in the different activities of NGP

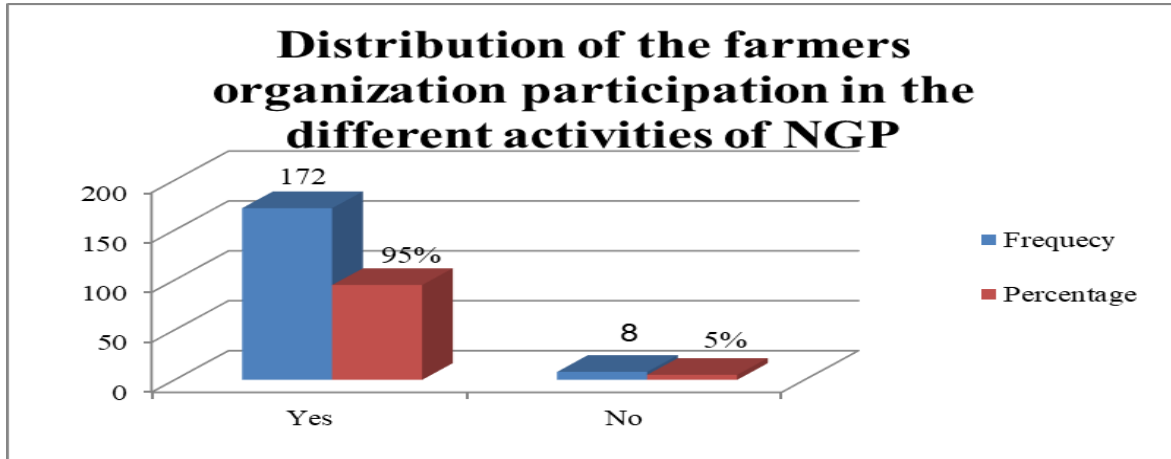| Do your farmers' organizations actively participate in the different activities of the NGP program?	Frequency	Percentage
Yes	172	95%
No	8	5%
Total	**180**	**100%**

Figure 6: Distribution of the farmers' organization participation in the different activities of NGP

Table 7 reveals the declaration of the respondents on the perception of farmer's organization in helping the implementation of the varied NGP activities. 172 or 95% of the respondents declared that the PO's (Peoples Organizations) or the 95% of them perceived that the said PO's (Peoples Organizations) are very helpful, in the implementation of NGP. This is true, the fact that the financial assistance of NGP is directly channeled to the PO's (Peoples Organizations).

Table 8: Distribution of the Perception if NGP has added information on farming knowledge and skills (N = 180)

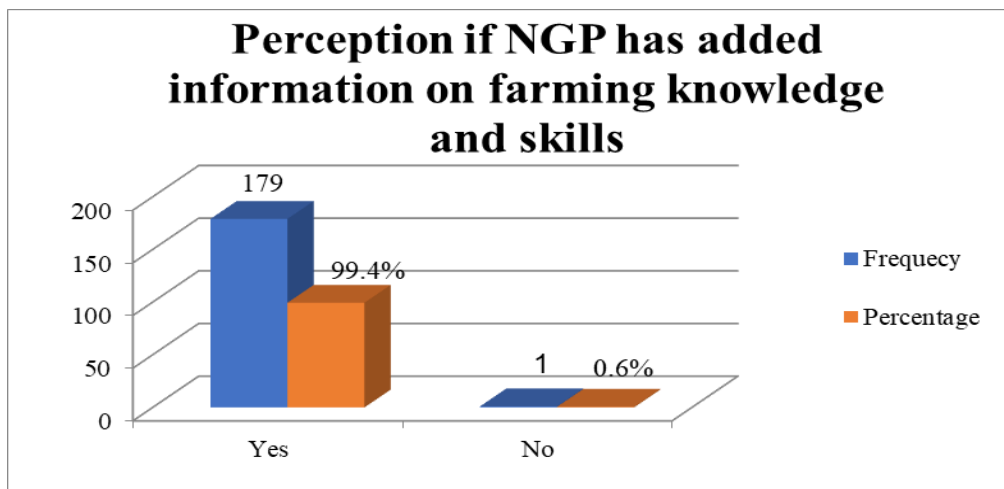| Perception if NGP has added information on farming knowledge and skills	Frequency	Percentage
Yes	179	99.4%
No	1	0.6%
Total	**180**	**100%**

Figure 7: Perception if the NGP has added information on farming knowledge and skills

Table 8 revealed the perception of the respondents if NGP has improved their knowledge and skills in farming. It can be deduced that 179 or 99.4% perceived that NGP has improved their farming knowledge and skills. While only 1 or 0.6% of the respondents declared that it had not improved their farming knowledge and skills. The positive response of the farmer-respondent was because NGP provided training for the farmer beneficiary. And thus, improve their skills and farming competencies.

Table 9: Distribution of the farmers' participation in NGP implementation (N = 180)

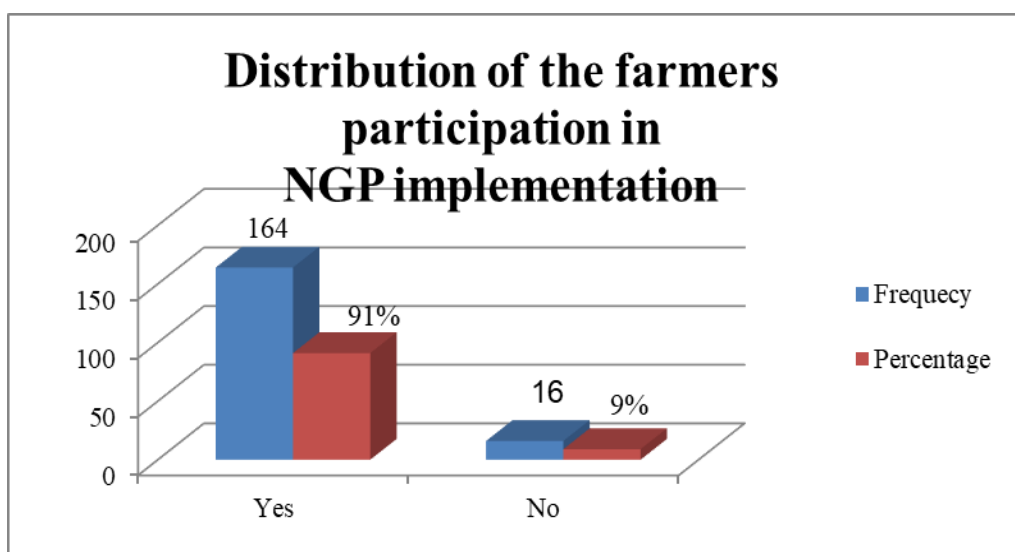| Have you participated in the NGP implementation?	Frequency	Percentage
Yes	164	91%
No	16	9%
Total	**180**	**100%**

Figure 8: Distribution of the farmers' participation in NGP implementation

Table 9 revealed the distribution of the farmers who had participated in the NGP implementation. It can be deduced from the table that 164 or 91% of the respondents participated in the NGP implementation. While 16 or 9% of the respondents did not participate in the NGP implementation/training, this is because the said farmers had an important appointment at that time during the training.

Table 10: Distribution of the Perception if the fund for NGP maintenance is enough (N = 180)

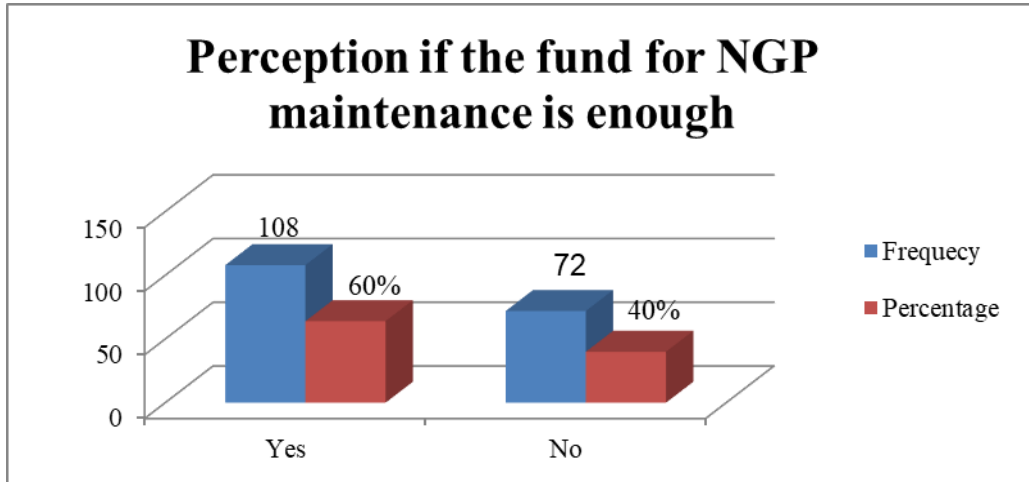| Perception if the fund for the maintenance is enough	Frequency	Percentage
Yes	108	60%
No	72	40%
Total	**180**	**100%**

Figure 9: Perception if the fund for NGP maintenance is enough

Table 10 reveals the distribution of the perception of the beneficiary if the fund of the NGP is enough. 108 or 60% of the respondents declared that the fund of NGP is enough. While 72 or 40% declared that the fund of NGP is not enough. It can be assumed from the table, the majority of the respondents declared that the funding of NGP is enough for its management.

Table 11: Distribution of the Perception of the respondents if NGP has improved the economy, protect from climate change & conserve the environment (N = 180)

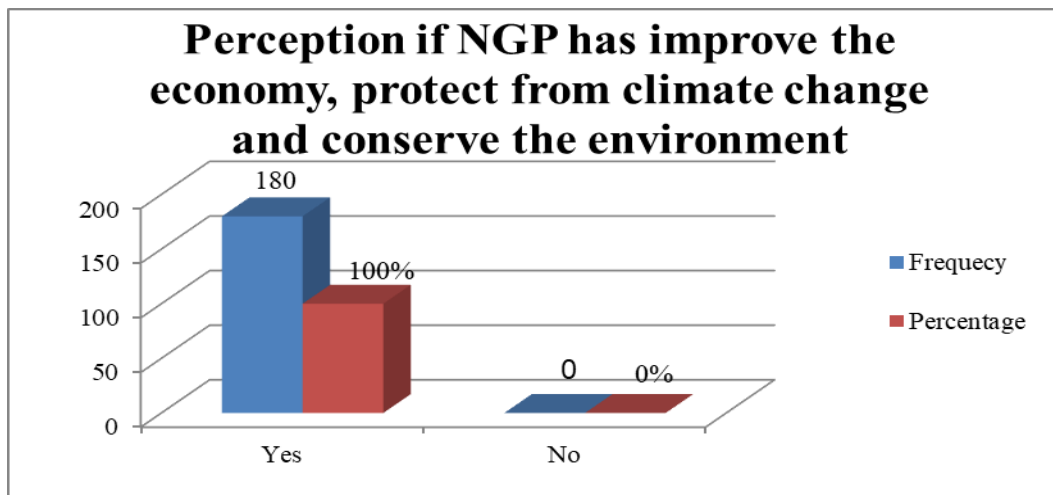| Perception of NGP has improved the economy, protect from climate change and conserve the environment	Frequency	Percentage
Yes	180	100%
No	0	0%
Total	**180**	**100%**

Figure 10: Perception of NGP has improved the economy, protect from climate change and conserve the environment

Table 11 reveals the perception of the respondents if NGP has improved the economy, protect from climate change, and conserve the environment. It can be deduced from the findings that 180 or 100% of the respondents declared that NGP has improved the economy, protect from climate change, and conserve the environment. This is due to the fact, that the farmer-beneficiary was trained in the program. And the program is well-funded.

Table 12: Distribution of NGP has added knowledge in farming & encourages the farmers to venture more into farming (N = 180)

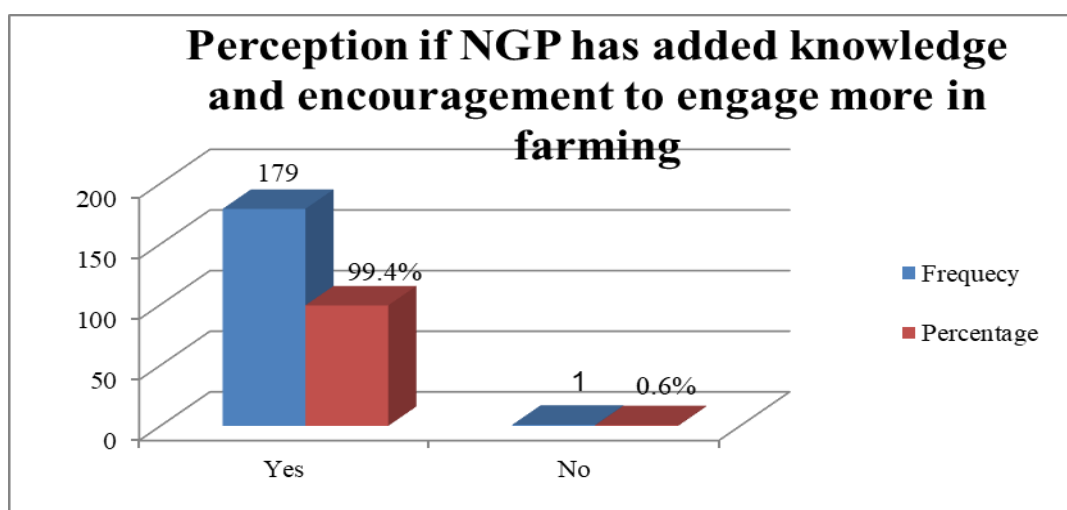| Perception if NGP has added knowledge and encouragement to engage more in farming	Frequency	Percentage
Yes	179	99.4%
No	1	0.6%
Total	**180**	**100%**

Figure 11: Perception of NGP has added knowledge and encouragement to engage more in farming

Table 12 revealed the perception of the farmers if NGP has improved their knowledge of the farmers. It can be concluded from the table that 179 or 99.4% of the respondents perceived it improved their knowledge of farming. While only 1 or 0.6% of the respondents perceived that it has not improved their knowledge of farming. This 1 or 0.6% of respondents with negative perception on this item was due to the fact when training on NGP, the respondent was not able to attend the training.

Table 13: Distribution that after the end of NGP, the project will be sustained (N = 180)

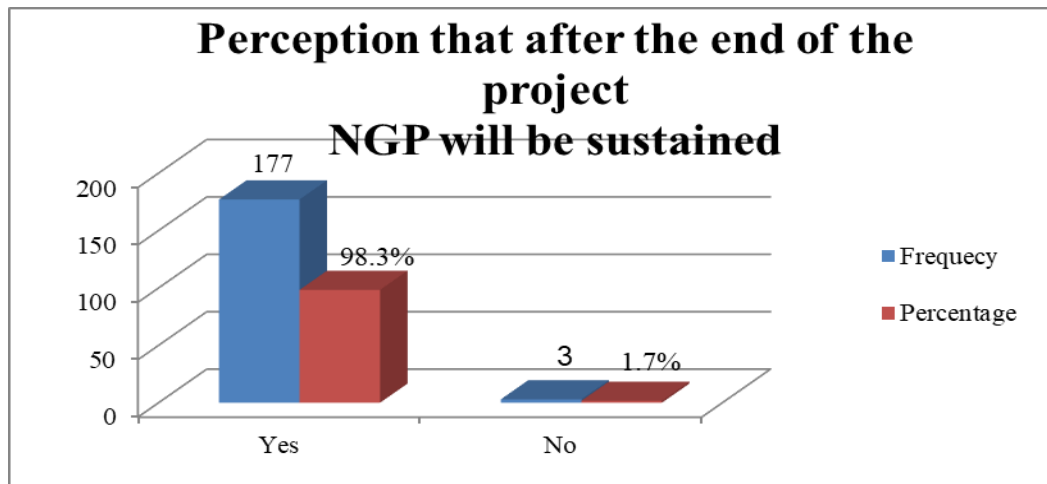| The perception that after the end of the project, NGP will be sustained	Frequency	Percentage
Yes	177	98.3%
No	3	1.7%
Total	**180**	**100%**

Figure 12: Perception that after the end of the project, NGP will be sustained

Table 13 reveals the distribution of the respondents on their perception of the sustainability of NGP. It can be deduced from the table that 177 or 98.3% of the respondents declared that the NGP will be sustained. While 3 or 1.7% of the respondents perceived that it will not be sustained. It can be deduced further, that the positive reply of respondents is due to the fact, that the NGP provided additional income to the farmer beneficiary/respondent. This is so because one of the objectives of NGP is livelihood intervention.

Table 14: Distribution of the Perception to continue the project after the coverage will end (N = 180)

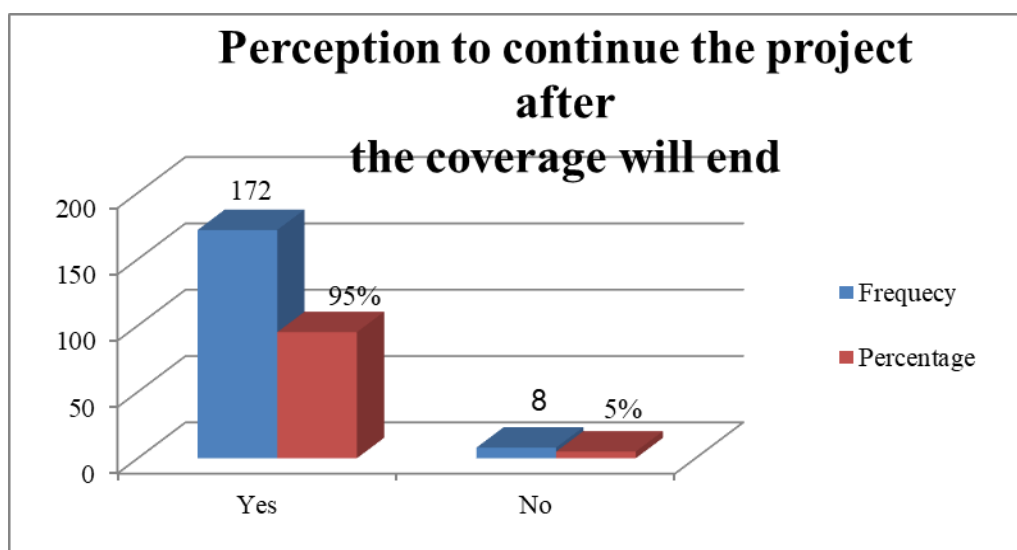| Perception to continue the project after the coverage will end	Frequency	Percentage
Yes	172	95%
No	8	5%
Total	**180**	**100%**

Figure 13: Perception to continue the project after the coverage will end

Table 14 revealed that 172 or 95% of the respondents desire that the project should be continued. While only 8 or 5% of the farmers' respondents that the project will not be continued. It can be deduced further, that the majority of the farmers' respondents would like the NGP to be continued for providing additional income for the farmers and thus increase their earnings.

Table 15: Extent of implementation of NGP as perceived by the implementor (N = 10)

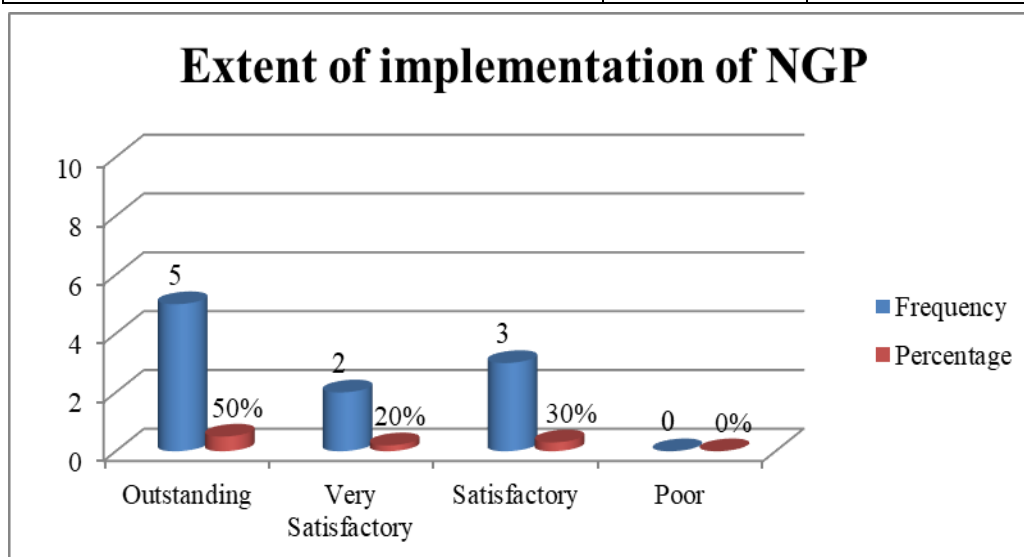| The extent of implementation of NGP	Frequency	Percentage
Outstanding	5	50%
Very Satisfactory	2	20%
Satisfactory	3	30%
Poor	0	0%
Total	**10**	**100%**

Figure 14: Extent of implementation of NGP

Table 15 revealed the extent of implementation of NGP as perceived by the implementor. It can be deduced from the table that 5 or 50% of the respondents perceived that the program is implemented in an "Outstanding" manner. 2 or 20% of the respondents perceived that the program has a "Very Satisfactory" implementation. While only 3 or 30% of the program is implemented satisfactorily. The positive perception of the respondents is a result of the good implementation of NGP. For it provides additional income for the farmers-respondents.

Table 16: Perception as to the adequacy of the budget of NGP as perceived by the implementor (N = 10)

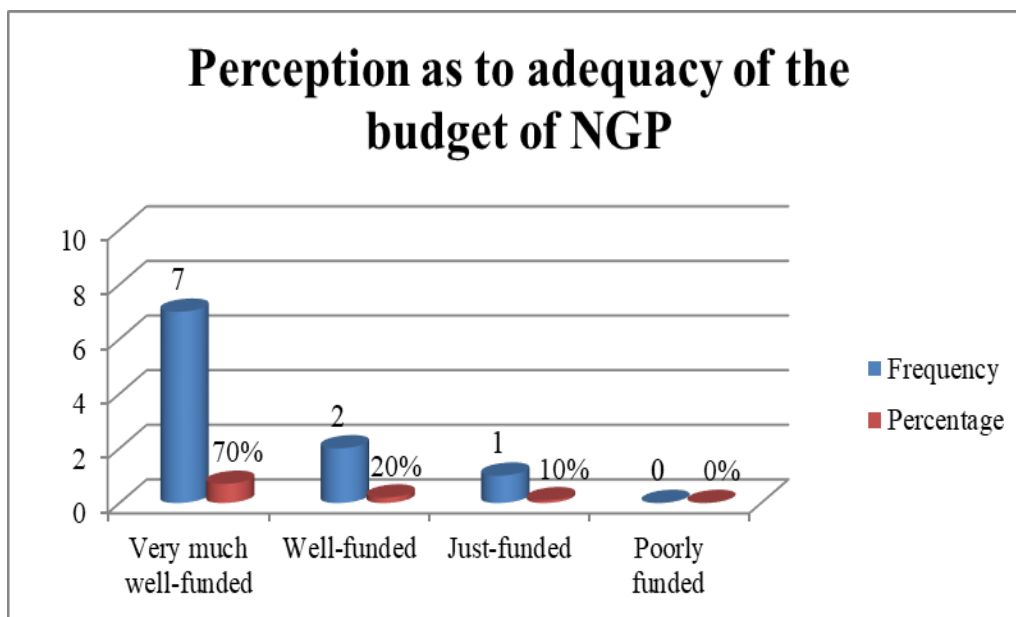| Perception as to the adequacy of the budget of NGP	Frequency	Percentage
Very much well-funded	7	70%
Well-funded	2	20%
Just-funded	1	10%
Poorly funded	0	0%
Total	**10**	**100%**

Figure 15: Perception as to the adequacy of the budget of NGP

Table 16 reveals the perception of adequacy in the budget of NGP. It can be deduced from the table that 7 or 70% of the respondents perceived that the project is very much well-funded. 2 or 20% of the respondents perceived that the project is well-funded. While 1 or 10% perceived that the project is just-funded. The good perception of the budget allocation revealed that NGP as a program of DENR is well-funded.

Table 17: Extent of Implementation of the training or capability building of the staff of NGP as perceived by the implementor (N = 10)

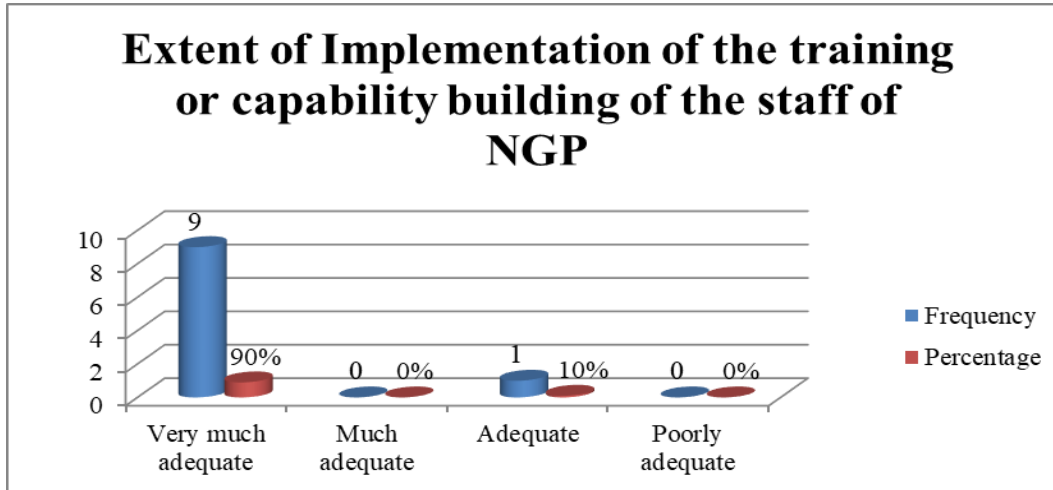| Extent of Implementation of the training or capability building of the staff of NGP	Frequency	Percentage
Very much adequate	9	90%
Much adequate	0	0%
Adequate	1	10%
Poorly adequate	0	0%
Total	**10**	**100%**

Figure 16: Extent of Implementation of the training or capability building of the staff of NGP

Table 17 revealed the extent of implementation on the capability building of the staff in the implementation of NGP. It shows that 9 or 90% of the respondents perceived that the training was very much adequate. While 1 or 10% perceived that the capability training of the implementors is adequate. It can be deduced further, that NGP implementors are well-trained in NGP implementation or management.

Table 18: Extent of Implementation of the integration of values formation of the capacity training as perceived by the implementor (N = 10)

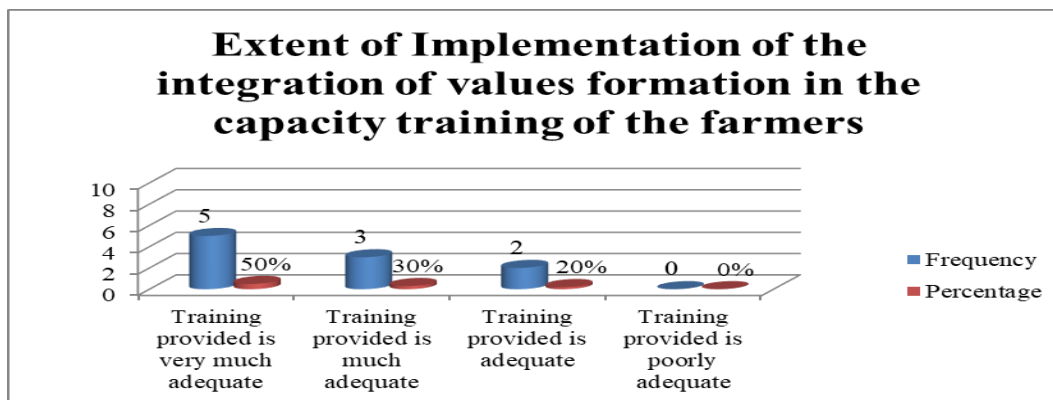| The extent of Implementation of the integration of values formation in the capacity training of the farmers	Frequency	Percentage
The training provided is very much adequate	5	50%
The training provided is much adequate	3	30%
The training provided is adequate	2	20%
The training provided is poorly adequate	0	0%
Total	**10**	**100%**

Figure 17: Extent of Implementation of the integration of values formation in the capacity training of the farmers

The table revealed the extent of implementation in the integration of values formation in the capacity/capability training as perceived by the implementer. It can be deduced from the table that 5 or 50% perceived that the training provided is very much adequate. On the other hand, 3 or 30% perceived that the training provided is much adequate. While 2 or 20% of the respondents perceived that the training provided is adequate. It can be deduced further from the table that values formation is part of the component of IGP training.

Table 19: Extent of cooperation of the villagers concerning the project (NGP) as perceived by the implementer (N = 10)

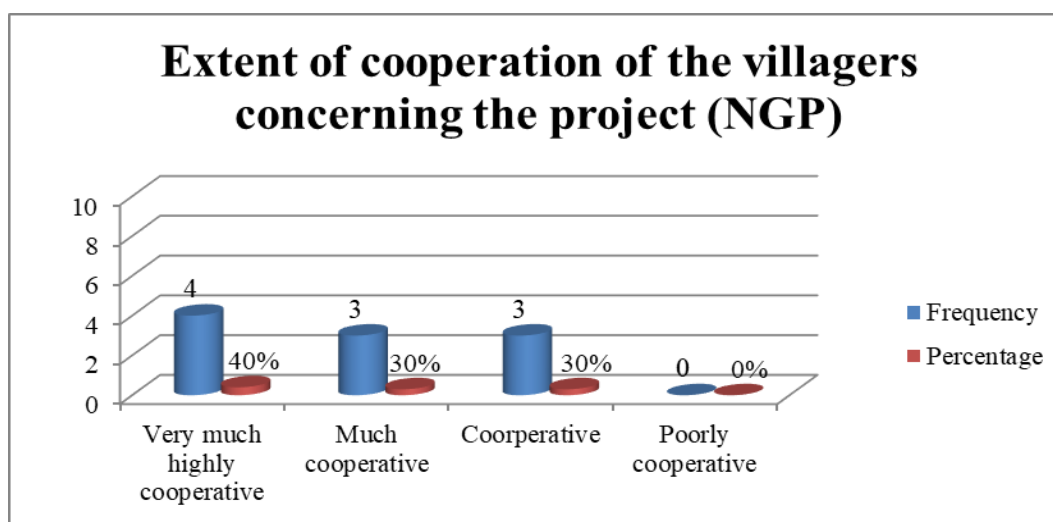| The extent of cooperation of the villagers concerning the project (NGP)	Frequency	Percentage
Very much highly cooperative	4	40%
Much cooperative	3	30%
Cooperative	3	30%
Poorly cooperative	0	0%
Total	**10**	**100%**

Figure 18: Extent of cooperation of the villagers concerning the project (NGP)

The table revealed the extent of cooperation of the villagers concerning the project (NGP) as perceived by the implementor. It can be deduced from the table that 4 or 40% of the respondents perceived that the farmers are very much highly cooperative in the project. 3 or 30% of the respondents perceived that the farmers are much more cooperative, and another 3 or 30% of the respondents perceived that the farmers are cooperative. The table revealed, that the implementor respondents revealed that the farmers are in general terms cooperative in the project which yields in its good implementation.

Table 20: Extent of operation of NGP as perceived by the implementer (N = 10)

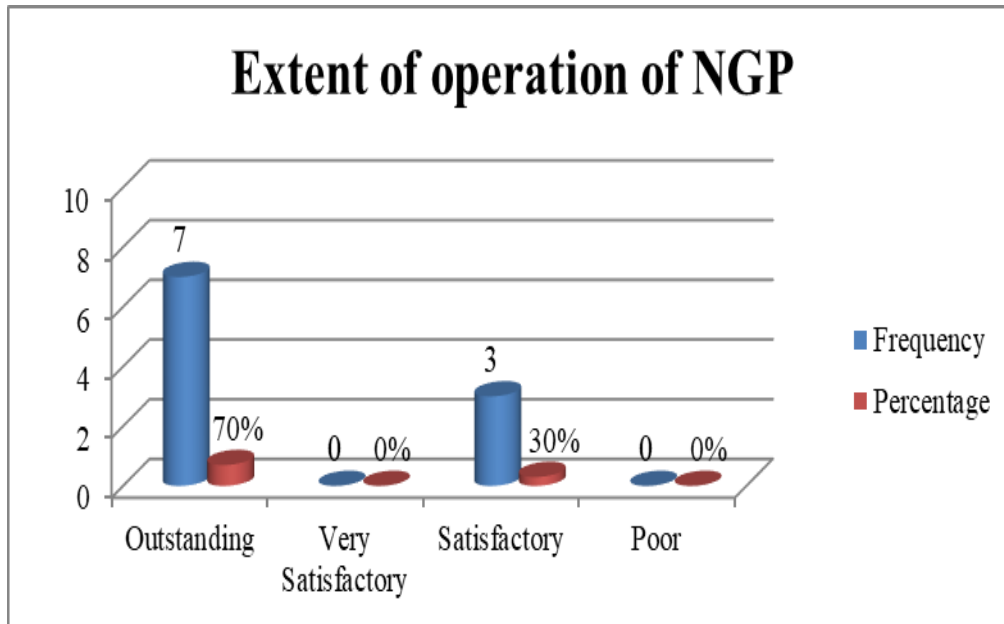| The extent of operation of NGP	Frequency	Percentage
Outstanding	7	70%
Very Satisfactory	0	0%
Satisfactory	3	30%
Poor	0	0%
Total	**10**	**100%**

Figure 19: Extent of operation of NGP

The table revealed the extent of implementation of the operation of NGP as perceived by the implementer. It can be deduced further in the table that 7 or 70% of the implementer respondents perceived that the operation of NGP is outstanding. 3 or 30% of the implementer respondents perceived that the operation of NGP is satisfactory.

Table 21: Extent of monitoring of NGP as perceived by the implementer (N = 10)

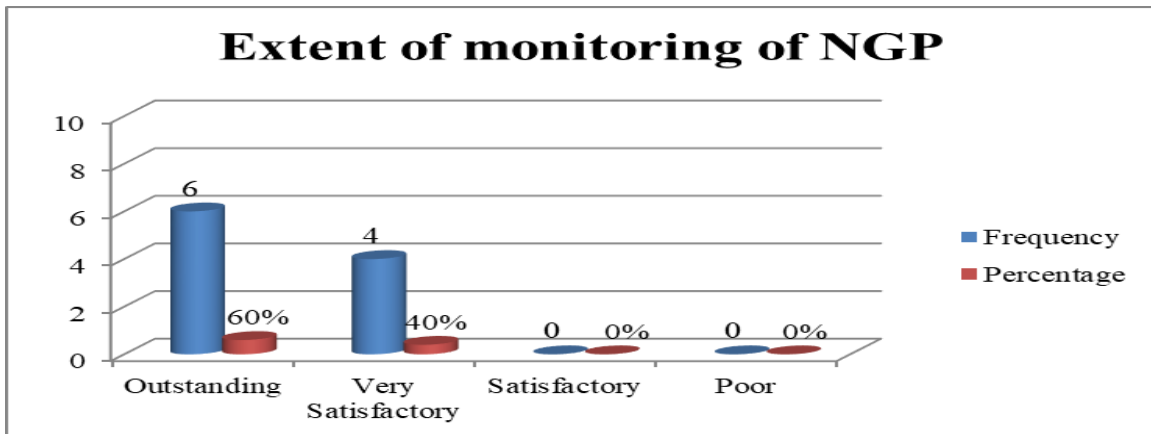| The extent of monitoring of NGP	Frequency	Percentage
Outstanding	6	60%
Very Satisfactory	4	40%
Satisfactory	0	0%
Poor	0	0%
Total	**10**	**100%**

Figure 20: Extent of monitoring of NGP

Table 21 revealed the extent of implementation of monitoring of NGP as perceived by the implementer. The table shows that 6 or 60% of the respondents perceived that the implementation of monitoring has a rating of "Outstanding". While 4 or 40% of the respondents perceived that the implementation of monitoring has a "Very Satisfactory" rating. It can be deduced further that the implementer perceived that the monitoring of NGP achieves its target and goals.

Table 22: Extent of implementation of feedback/monitoring of NGP as perceived by the implementer (N = 10)

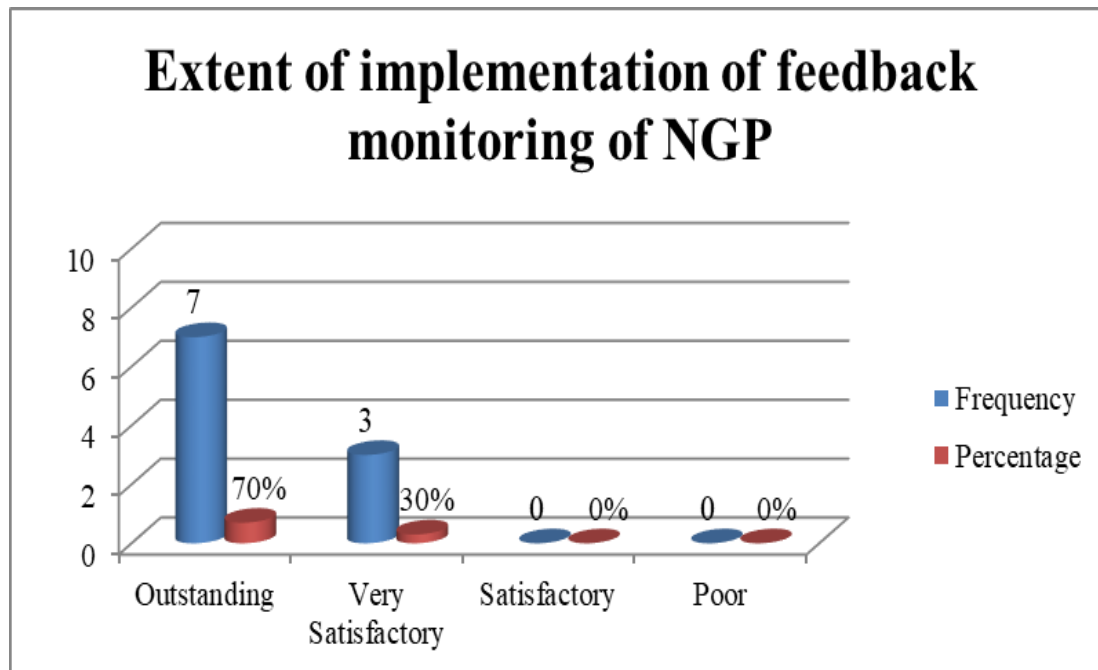| The extent of implementation of feedback monitoring of NGP	Frequency	Percentage
Outstanding	7	70%
Very Satisfactory	3	30%
Satisfactory	0	0%
Poor	0	0%
Total	**10**	**100%**

Figure 21: Extent of implementation of feedback monitoring of NGP

Table 22 revealed the extent of implementation of the feedback/monitoring of NGP as perceived by the implementer. It can be deduced from the table that 3 or 30% of the respondents perceived that the implementation of feedback/monitoring of NGP is "Very Satisfactory". On the other hand, 7 or 70% of the respondents perceived that the implementation of feedback/monitoring of NGP is "Outstanding". The very good feedback or monitoring perception on NGP was because NGP is a well-funded project.

Table 23: Extent in the level of acceptance of NGP by the community as perceived by the implementer (N = 10)

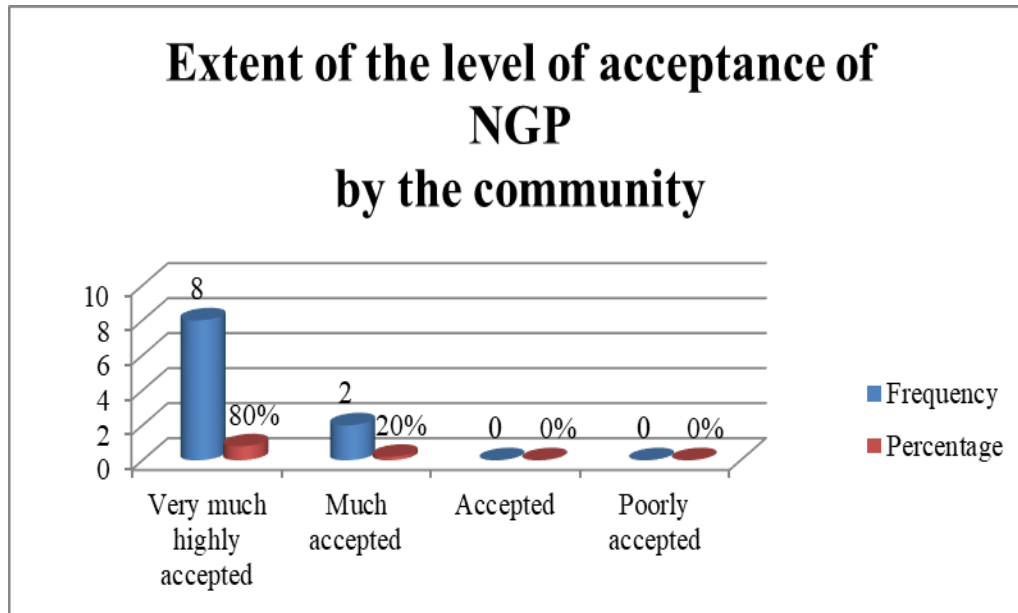| The extent of the level of acceptance of NGP by the community	Frequency	Percentage
Very highly accepted	8	80%
Much accepted	2	20%
Accepted	0	0%
Poorly accepted	0	0%
Total	**10**	**100%**

Figure 22: Extent of the level of acceptance of NGP by the community

Table 23 revealed the extent of the level of acceptance of the community of NGP as perceived by the implementer. The table revealed that 8 or 80% of the respondents perceived that they very much highly accepted the project. While 2 or 20% of the respondents perceived that they have much accepted the project. It means that the positive perception of NGP acceptance is because NGP is well-managed.

Table 24: Extent of implementation of land use in NGP as perceived by the implementer (N = 10)

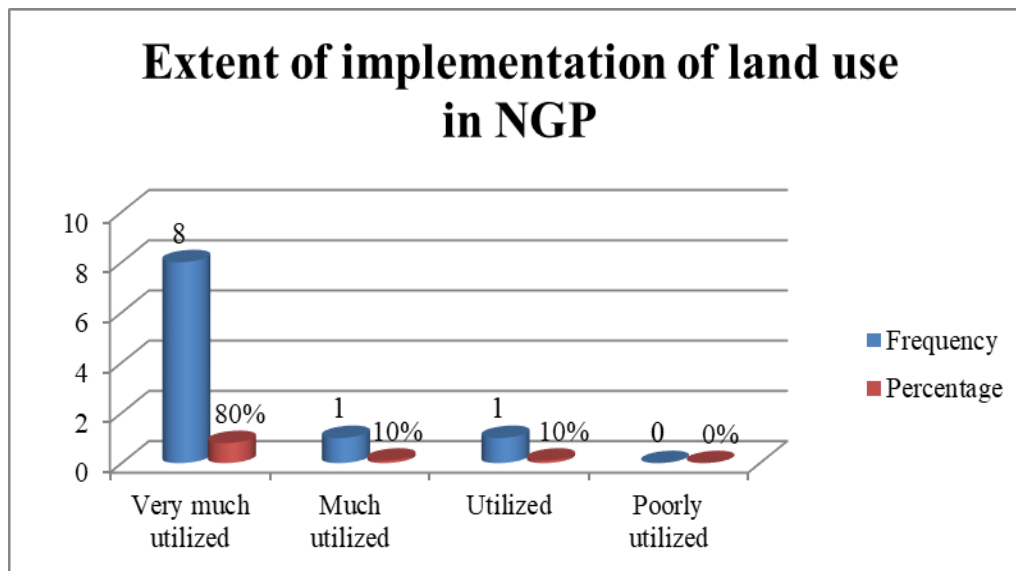| The extent of implementation of land use in NGP	Frequency	Percentage
Very much utilized	8	80%
Much utilized	1	10%
Utilized	1	10%
Poorly utilized	0	0%
Total	**10**	**100%**

Figure 23: Extent of implementation of land use in NGP

Table 24 revealed the extent of implementation of land use in NGP as perceived by the implementor. It can be deduced from the table that 8 or 80% of the respondents perceived that it has very much utilized the land. 1 or 10% of the respondents revealed that it has much utilized the land. Another 1 or 10% of the respondents perceived that it has utilized the land. The table further revealed that the land had been utilized robustly in NGP.

Summary of Findings:

The following is the summary of the findings of the study:

i.   DENR NGP provided exact seedlings and the proper seedling provided resulted in good yields, and make the land more productive.

ii.   The DENR NGP improved the livelihood of the farmers. This program is an additional source of income for the farmers-beneficiaries.

iii.   The farmers perceived that the program should be continued for it is sustainable, and improved their livelihood and good response to climate change.

iv.   The Farmer Organizations (FOs) welcome and greatly commended the project. For the farmer organization (also called the People's Organizations) was an active partner of NGP implementation.

v.   The NGP has improved the farming skills of the farmers. Due to the training, it provided to the farmers, not only of the good method of farming but the values inculcation it provided in the NGP.

vi.   The farmers perceived that the funds of NGP are enough for the operation of the NGP. Thus, the funding sustains the operation of NGP.

vii.   The farmers perceived that NGP objectives such as climate change mitigation and adaptation, and environmental stability has been achieved. Including its aim to increase the income of the farmer-beneficiary.

viii. The implementor-respondents perceived the implementation of NGP in an "Outstanding" manner. This is because NGP is well-funded, well-monitored & harnessed a very good participation of the farmer-beneficiary.

ix. The budget allocation of NGP is well-funded and released on time and maintained properly by the implementor and the farmer-beneficiary.

x. NGP as a program had greatly used the land and made the land productive. The land planted is a robust illustration of the effective land use of NGP.

Conclusion:

The National Greening Program (NGP) aims to address the call for reforestation due to the dwindling forest covers of the Philippines. This is a reforestation program with the noble aim to extend livelihood interventions to the farmer-beneficiary. It provided training to the farmer-beneficiary. As a whole, the NGP has a positive or good impact on the economic conditions of the farmer-beneficiary and has a huge impact on reforestation or the biophysical condition of the site. The community experienced that the project empowers them and the community feels that the project not only empowers them but makes them more responsible for the operation or management of NGP. As a whole, the implementation of NGP for A.Y. 2017 at Barangay Gata, San Agustin, Surigao del Sur had been very effective.

Recommendations:

It is recommended that the following studies will be conducted in the future:

i. LGU & PO's collaboration in NGP implementation;

ii. The academic involvement collaboration on NGP implementation.

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