International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2018): 7.426

The Status and Implementation of the Help for Catubig Agricultural Advancement Project (HCAAP)

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Abstract: ***Northern Samar has basically an agricultural economy with more than 349,800- hectare total land area with high incidence of poverty in the region, dubbed as the 'rice granary' in Eastern Visayas. It is on this basis that HCAAP was conceptualized wherein the national government obtained a loan from Japan International Cooperation Agency (JICA) amounting to 5.2 billion yen or 3.4 billion in pesos allocating 2.4 billion pesos alone to irrigate 4, 550 hectares of agricultural lands. However, the implementation stopped in 2013 with the budget nearly exhausted and the project uncompleted. Specifically, this research aimed to assess the status of the HCAAP and implementation issues. The areas covered by the HCAAP were the Municipalities of Catubig and Las Navas both located in the Catubig Valley. A descriptive-evaluative study, used an eclectic approach or a mixture of qualitative and quantitative methods for data collection and analyses. Common qualitative techniques were applied such as observation, key informant interview, focus group discussion (FGD), and review of secondary data. The respondents were beneficiaries and key informants composed of personnel from the implementing agencies: NIA, DPWH, DOH, DA, Provincial Government of Northern Samar, Municipality of Catubig, and Municipality of Las Navas to execute irrigation and drainage, rural infrastructure improvement, agricultural support services, schistosomiasis control, and institutional components. Purposive and stratified sampling were used in selecting barangays and respondent-beneficiaries respectively. Open ended questions for the semi-structured interview was utilized. Observation guide was also formulated as supplementary tool to semi-structured interview, while FGD among identified barangay officials, non-formal leaders and other stakeholders was employed. It was found out that the HCAAP components were of moderate functionality and availability. It was concluded that the project has to be totally completed as it negates the beneficiaries of the services it proposed. Irrigation system and farm-to-market roads were accessible and available to many but more beneficial to few landed families and businessmen. They found their agricultural lands suited for commercial and residential sites and the project was not significant to landless farmerswhere their clutch and retention to the land would depend on the pleasure of the landlord. Hence, until a farmer is given a land of his own, whatever rural development projects like this would create availability and accessibility meaningless.***

Keywords: HCAAP, Irrigation, Rural Development Project

1. Introduction

Northern Samar has basically an agricultural economy, an agricultural province with more than fifty percent of its 349,800-hectare total land area is devoted to agriculture. Despite this agricultural advantage, the province suffers from production deficiency of major agricultural products particularly rice.

The province which has been left underdeveloped for a long time was once ranked number 7 with high incidence of poverty in the country and number 1 in the entire region which, ironically, the ricegranary of Region 8 could be found- the Catubig valley (Cardenas, 2009).

There were rural development projects that date back in the 1970's. Considered as the flourishing years of the Catubig Valley Development Project (CVDP) that shortly became the offshoot of the successfully the same project- Northern Samar Integrated Rural Development Project (NSIRDP).

These two earlier projects became the basis for another gargantuan venture relative to the agricultural development in Northern Samar. The Help for Catubig Agricultural Advancement Project (HCAAP) was conceptualized and on May 30, 2001 an amount of 5.2 billion yen or 3.4 billion pesos was extended through a loan agreement between Japan International Cooperation Agency (JICA) and the National Government.

HCAAP is composed of the following five components: Irrigation and Drainage Component; Rural Infrastructure Improvement and Rural Water Supply Component; Agricultural Support services Component; Schistosomiasis Control Component; and Institutional Development Component. The seven implementing agencies were National Irrigation Administration (NIA), Department of Agriculture (DA), Department of Health (DOH), Department of Public Works and Highways (DPWH), Provincial Government of Northern Samar (PGNS), Municipality of Catubig, and the Municipality of Las Navas. All these components are geared towards improvement of the socio-economic condition of the rural people.

The project was implemented amid some problems and inadequacies.

On the bases of the foregoing, the researcher decided to conduct a study to determine how far the program has achieved its goal and the problems hounding its operation. According to Mallilin, undesirable deviation from standard, financial losses and unnecessary waste of efforts by the personnel implementing the program can be avoided when timely evaluation is conducted. Hence, this study.

2. Objectives of the Study

Generally, the objective of this research work is to assess the status and implementation of the Help for Catubig Agricultural Advancement Project (HCAAP).

Specifically, this research aims to meet the following objectives:

1) To determine the profile of the respondents in terms of:
   a) Sex
   b) Age
   c) Household size
   d) Landholdings
   e) Educational attainment
   f) d. Occupation
   g) Monthly family income

2) To assess the status of the HCAAP in terms functionality and availability of the following components:
   a) Irrigation and drainage
   b) Rural infrastructure improvement
   c) Agricultural support services
   d) Schistosomiasis control
   e) Institutional development

3) To identify the issues encountered by the respondents in the implementation of the HCAAP.

3. Methodology

Northern Samar is one of the three provinces composing the island of Samar created on June 19, 1965 by virtue of Republic Act No. 4221. It is situated in the northernmost tip of the island and is divided into two congressional districts.

The survey areas selected are the barangays covered by the HCAAP in the Municipalities of Catubig and Las Navas which are both located in the Catubig Valley.

For its five components, the HCAAPcovers64 barangays, 28 out of 47 barangays from the Municipality of Catubig and 36 out of 53 barangays from the Municipality of Las Navas.

The irrigation component will benefit 1, 303 households. In Catubig, it has the service area of 1, 150 hectares covering 14 barangays.Another 14 barangays will benefit for health component.

In Las Navas, the irrigation component of 3, 050 hectares will serve 26 barangays and 10 barangays for health component.

This research work is a descriptive- evaluative study attempting to assess the status and implementation issuesof the HCAAP.

The nature of the study calls for an eclectic approach or a mixture of qualitative and quantitative methods for data collection and analyses.

The qualitative part of the study determined the status of the five components of the HCAAP with respect to its functionality and availability to the beneficiaries. The very common qualitative techniques were used such as observation, key informant interview, focused group discussions (FGD), and review of secondary data.

On the other hand, the quantitative techniques like survey employing interview schedule was also utilized.

Purposive sampling was used in selecting Barangays Hangi, Magtuad, San Jorge, Sulitan, and Tagab-iran, from the 64 barangays covered by the five components of the HCAAP. The five barangays which have a total of 934 households that the entire stretch of the irrigation component, from the nearest to the farthest point had a representative barangay.

Stratified sampling was used in selecting the respondent-beneficiaries. First, sample size was computed using the formula of Slovin as cited by Adanza (2006).From that formula, 280 constituted the sample size. With stratified sampling, the five barangays were equally represented. Hence, purposively chosen barangays with big population had bigger sample while those with small population had smaller sample.

The respondents of the study were the 280 beneficiaries in the two (2) purposively chosen barangays. Barangays Magtuad and Sulitan were chosen for Catubig and Barangays Hangi, San Jorge, and Tagab-iran for the Municipality of Las Navas.

Information was also sourced out from a group of key informants composed of the personnel from the implementing agencies: Irrigation and drainage component (NIA); Rural infrastructure component (DPWH, PGNS, MC and MLN); Schistosomiasis control (DOH); agricultural support services (DA); institutional development component (NIA, DOH, DA, and PGNS); barangay officials; non-formal leaders; and NGO representatives.

There were two sets of instruments in this study. One set of instrument was an interview schedule for the beneficiary-respondents which included three parts. Part I dealt with the profile of the respondents. Part II included the items for the assessment of the status of HCAAP. Lastly, Part III asked about the issues encountered by the respondents in the implementation of the HCAAP's services and facilities.

Another set of instrument was a series of open ended questions for the semi-structured interview with the personnel of the implementing agencies directly involved in the operation of the HCAAP's five components. The open ended questions delved into the status of the HCAAP's five components and the responses were categorized into themes. This unstructured interview guide was incorporated in the study to cross- check responses of the respondents.

An observation guide was also formulated as supplementary tool to semi-structured interview.

Focus group discussion (FGD) among identified barangay officials, non-formal leaders and other stakeholders was also utilized to explore the status of the HCAAP.

On the status of HCAAP's five components, the extent of the availability and functionality of the different subprojects under each component was measured using a 5-point scale of "very functional" which was given 5 points; "functional", 4 points; "moderately functional", 3 points; "less functional", 2 points; and "non- functional", 1 point. The scores obtained by the respondents for each indicator were totaled to get the weighted mean.

The weighted mean of each indicator was interpreted as follows.

Category	Score	Weighted Mean	Interpretation
Very Functional and available	5	4.20-5.00	Very High Functionality and Availability
Functional and Available	4	3.40-4.19	High Functionality and Availability
Moderately Functional and Available	3	2.60-3.39	Moderate Functionality and Availability
Less Functional and Available	2	1.80-2.59	Low Functionality and Availability
Non-Functional and Available	1	1.00-1.79	Very Low Functionality and Availability

Responses were computed by calculating the average for every factor. Moreover, interview results on the status of the HCAAP were carefully analyzed until emerging themes are achieved.

The collected data were treated using frequency counts, percentages, mean, and ranking.

4. Presentation, Analysis and Interpretation of Data

The profile of the respondents-Beneficiaries

The demographic factors that were considered in this study are the sex, age, household size, landholdings, educational attainment, occupation, and monthly income.

Sex

Fromamong the two hundred eighty respondent-beneficiaries, 183 or 65.35 percent were male and 97 or 34.64 percent were female. It can be deduced from the data that husbands or fathers have tacitly assumed the role of household heads hence, often times they speak on behalf of their families.

Age

Data shows that 77 or 27.50 percent of the respondent-beneficiaries were 41 to 50 years old; followed by 69 or 24.64 percent were 51 to 60 years old; 61 or 21. 79 percent were 31 to 40 years old; 36 or 12. 86 were 61 to 70 years old; 33 or 11. 79 percent were 20-30 years old; and 4 or 1. 42 percent were 71-80 years old. Based on the mean of 46 years old, above the mean was considered as old and the mean were considered as young. This finding shows that most of the respondent- beneficiaries are within the young brackets. Also, this finding suggests that they are still physically strong to endure farming activities, hence, they are most likely to benefit from the HCAAP's services and facilities.

Household Size

One hundred and fifty three or 54. 64 percent of the respondents had household size between 6-10 members, followed by 99 or 35.35 percent had 1-5 household members and 28 or 10 percent had 11-15 household members. This data indicates that majority of the respondent- beneficiaries have large families. It has a mean of 6.7 which is above the average household size of 5.2 as set by the National Statistics Office of Northern Samar. It can be inferred that the pressure of sustaining a large family will drive the respondent-beneficiary to access to HCAAP's components' services and facilities for higher rice production and for bigger income.

Landholdings

On rice lands**,** fifty-nine or 43.39 percent tilled areas of less than one hectare; 37 or 27.20 percent had between one and less than two hectares; 22 or 16.19 percent cultivated areas between two and less than three hectares; 11 or 8.09 percent worked on areas between three and less than four hectares; and 7 or 5.14 percent tilled an areas between four and less than five hectares. On coconut lands, twenty-eight or 41.18 had less than one hectare; 16 or 23.53 percent had between one and less than two hectares; 13 or 19.11 percent farm on areas between two and less than three hectares; 8 or 11.77 percent worked on areas between three and less than four hectares; and 3 or 4.41 percent had an areas between four and less than five hectares. This indicates that not all of the respondent-beneficiaries have landholdings and most have only small areas being cultivated or farmed.

Educational Attainment

It could be gleaned from Table 1 that 120 or 42.85 percent attended elementary education while 55 or 19. 64 percent graduated from elementary education. Forty- five or 16.08 percent attended secondary education and 32 or 11.42 percent finished high school education. And, 19 or 6.78 percent attended college education whereas 9 or 3.28 percent had successfully graduated from tertiary education. The data indicates that all the respondent- beneficiaries have undergone formal schooling. However, majority of them have only attained elementary education. It can be inferred that with their low educational attainment, their chances of finding good-paying and stable jobs would also be low. This confirmed the findings of Sen that factor such as illiteracy relates to diminished income and capability.

Occupation

Aside from farming other Respondent- beneficiaries had additional occupations. Sixty-six(66) or 23.57 were into livestock producing; 19 or 17.43 percent in store operation; nine (9) or 8.25 in carpentry; seven (7) or 6.42 percent as passenger motorcycle drivers; six (6) or 5.50 percent as motorboat driver; four (4) or 3.66 percent as fresh water mussel divers; two (2) or 1.83 were into copra and abaca buying; two (2) or 1.83 were barangay officials; two (2) or 1.83 percent ventured into money lending; and one (1) or 0.91 as rice mill operator. This finding suggests that income from farming does not suffice as the main source of income but augmented by other occupation. Sen also confirmed that the enhancement of human capabilities tends to go with productivities and earning power.

Monthly family income

Table 1 also shows that 126 or 45.00 percent of the respondent-beneficiaries had a monthly income between 1,000-3,000 with 8 or 2.85 percent from 15,001-20,000. This finding indicates that most of the respondent-beneficiaries have low income, barely to meet basic needs such as food, clothing and shelter. This can be attributed to their educational attainment and small landholdings and the kind of additional job they have which are practically menial. The findings likewise confirmed the conclusions of Sen that intertwining factors, economic power and capabilities explain the link between the right to food and to health, food, and housing.

Table 1: Frequency Distribution by Profile

Sex	*Frequency*	*Percent*
Male	183	65.36
Female	97	34.64
Total	**280**	**100.00**
Age		
71- 80 years old	4	1.42
61- 70 years old	36	12.86
51- 60 years old	69	24.64
41- 50 years old	77	27.50
31- 40 years old	61	21.79
20- 30 years old	33	11.79
No. of Household Members		
11- 15	28	10.00
6- 10	153	54.64
1- 5	99	35.35
Size of Rice Lands		
0 to 0.9 has.	19	13.97
1.0 to 1.9 has.	77	56.61
2.0 to 2.9 has.	22	16.19
3.0 to 3.9 has.	11	8.09
4.0 to 4.9 has.	7	5.14
Size of Coconut Lands		
0 to 0.9 has.	21	30.88
1.0 to 1.9 has.	23	33.82
2.0 to 2.9 has.	13	19.12
3.0 to 3.9 has.	8	11.77
4.0 to 4.9 has.	3	4.41
Educational Attainment		
College Graduate	9	3.28
College Level	19	6.78
High School Graduate	32	11.42
High School Level	45	16.08
Elementary Graduate	55	19.64
Elementary Level	120	42.85
Occupation (Other than farming)		
Livestock producer	66	60.55
Store operator	19	17.43
Carpenter	9	8.25
Passenger motorcycle driver	7	6.42
Motorboat driver	6	5.50
Fresh water clam diver	4	3.66
Copra and abaca buyer	2	1.83
Brgy. Official	2	1.83
Money lender	2	1.83
Rice mill operator	1	0.91
Monthly Income		
15,001 – 20,000	8	2.85
10,001 – 15,000	19	6.78
6,001 – 10,000	35	12.05
3,001 - 6,000	92	32.85
1,000 - 3,000	126	45.00

The Status of the HCAAP

The HCAAP provides irrigation system service areas of 4,550 hectares of land from the Municipality of Las Navas and Catubig. An amount of 2.4 billion pesos was allocated for this component alone from the 3.4 billion pesos total budget of the project.

Irrigation and Drainage Component

Out of the 3 dams, the HCAAP has to construct, only the Catubig Dam (Dam 1) was completed. As per observation, the Bulao Dam (Dam 2) and Hagbay Dam (Dam 3) are still under construction. According to a key-informant, HCAAP is over due to the loan stoppage from JICA and the remaining two dams will not anymore be completed under the said project. This was validated by another key-informant when he confided that implementation of irrigation system has been continued in Pinipisakan Irrigation Project (PIP), another project sourced by the national government. However, with the completion of the Catubig Dam it already benefited some farmers from Brgy. San Isidro to Brgy. San Jorge and other respondent-beneficiaries, for Catubig Dam only, interpreted and assessed it with high functionality and availability or 3.66 weighted mean.

Irrigation system as observed is not yet available in the barangays in the left side of the Catubig River because of the non-construction of the left main canal. The sub- component received a lower score giving only moderate functionality and availability with only 2.42 percent weighted mean.

Some proposed lateral and drainage canals were unconstructed. “The lateral canals are intertwined with the need for irrigation water. Even if there is the main canal, irrigation system will not bring water and reach other farms without lateral canals.” Such is the problem in Brgy. San Jorge that prompted other respondent-beneficiaries to use water pumps to source out water from the main canal. This sub-component received the lowest interpretation among sub-components with Very Low Functionality and Availability or 3. 42 percent weighted mean.

Demonstration farms were implemented at the inception of the HCAAP’s implementation in Barangay Del Pilar to serve the respondent-beneficiaries of Barangays Tagab- iran, Hangi, and nearby barangays. Other demonstration farms were established in Barangay San Jorge and Barangay Sto. Tomas for the respondent-beneficiaries in nearby barangays. The demonstration farms after their use were returned back to the owners of the land for their own farming activities. The sub-component received high functionality and availability or 3.42 weighted mean.

In totality, this component received a grand mean of 2.75 points or moderate functionality or availability. This indicates that with only one dam completed it cannot sufficiently irrigate the areas covered by the HCAAP. This confirmed the findings of Richey that irrigation water may mean the difference between abundant crop and crop failure.

Rural Infrastructure Improvement Component

The National, Las Navas Bridge, Ferry Landing Rack, and Farm- to-market road are now 100 percent completed. It is

manifested by the 4.56 rating interpreted as with very high functionality and availability. This shows that the Rawis-Las Navas National Road, Las Navas Bridge, and the 9.04 kilometers Las Navas-Bulao-Magsaysay-farm-to-market road are now functional and available to the respondent-beneficiaries of the covered barangays. This finding confirmed the DA network plan that FMRs improve the mobility of people, goods, and services.

Ferry Landing Rack had been constructed in two places; one in Catubig and the other in Las Navas. It is fully implemented and is now functional and available to the respondent-beneficiaries. It received a 4.50 weighted mean or very high functionality and availability. This also denotes that this sub-component is already functional and available for use by the respondent-beneficiaries.

Water supply sub-component had not been sustained in all barangays covered in this study. The reservoirs and dug well had been unusable after its construction. It has 1.16 or very low functionality or availability interpretation. The respondent-beneficiaries were already using the National Road and other sub-components. It further indicates that there were no sustainable water supply on HCAAP covered barangays after its implementation. This confirmed the report of the World Bank that there is an abundant supply of raw water, yet there is a significant number of people who were unable to avail safe water.

However, this component received a total 3.82 point or high functionality and availability.

Agricultural Support Services Component

Agricultural extension and training received a very high functionality and availability interpretation with a 4.18 rating. Research Center has 2.25 or low functionality and availability followed by Credit Facilities with 1.08 or very low functionality and availability.

The component only received a grand mean of 2.50 points or low functionality or availability.

This confirms the report of NIA and the findings of Rola and Tullao that increase in production requires not only efficient distribution of water but also with adequate supplies, labor inputs, extension strategies consistent with the nature of new technologies, and financial resources.

Schistosomiasis Control component

There were monitoring and supervision by health personnel sustaining the thrusts to reduce the prevalence of schistosomiasis in the HCAAP covered barangays. The RHU of every municipality is responsible in the sustainability of the component with the devolution of some DOH personnel to local government. The RHU, together with the Barangay Health Workers of the barangays concerned, administer drug for the schistosomiasis mass treatments. In Catubig mass treatment is being held in July of every year. The sub-component had a 3.97 weighted men or high functionality and availability.

Only 2 public toilets still stand in Brgy. Hangi and Brgy. Sulitan from among other barangays covered by the study. This sub-component received a 1.07 weighted mean or very low functionality and availability.

Footbridges could only be seen in the barangays where the right main canal is available like Brgy. Hangi and Brgy. San Jorge as it was constructed to prevent people from crossing the canals especially when infested with schistosomiasis. It had a low functionality and availability with 2.45 weighted mean. This indicates that not all of the respondent-beneficiaries availed of the said footbridges.

It is rarely seen that the DOH personnel apply medicines to the farms for snail control. Respondent-beneficiaries in other barangays have not recalled any treatment for snail control. This sub-component had low functionality and availability interpretation with a 2.36 weighted mean.

Equipment for Schistosomiasis Control Component received a weighted mean of 1.62 or within the very low functionality and availability. It indicates that although there were visits from the health personnel most of the respondent-beneficiaries have not availed or seen other sub-components functioned. This confirmed the conclusion of Co that health care delivery is taxed by the frequent natural disasters as man-made disasters that occur in the country. These had led to sudden shifts in priorities and the real location of already scarce resources. The lack of resources was manifested in the shortage of health facilities, the weak enforcement of regulation.

Summing up the weighted mean received by the sub-components, the component established a grand mean only of2.53points or low functionality and availability.

Institutional Development Component

"Only three irrigators associations were organized despite of the 12 IA's targeted by the HCAAP's implementation. Respondent- beneficiaries of this study are still called for a meeting or for a seminar." The three IA's are the following: Pinipisakan IA, Haremasan IA, and Robasan IA. Among the three IAs, it is the Robasan where Brgy. San Jorge is a part that is well-established. It has functional organization and officers that manifest in the regularity of monthly meetings, sending members to seminars and trainings, providing insurance to farm activities, and giving of seeds to members for inter-cropping. Irrigators association has given a 3.79 or high functionality and availability. This can be inferred that Llandelar is correct that irrigators association can bring about more services.

With the 2.46 weighted mean or low functionality and availability capability-building of NGOs and LGUs, the grand mean received by the component is 3.12 or moderate functionality and availability.

Table 2: Summary Table for Status of the HCAAP

Statements	Sub-Mean	Interpretation
Irrigation and Drainage Component	2.75	Moderate Functionality and Availability
Rural Infrastructure Improvement Component	3.82	High Functionality and Availability
Agricultural Support Services Component	2.50	Low Functionality and Availability

Schistosomiasis Control Component	2.53	Low Functionality and Availability
Institutional development Component	3.12	Moderate Functionality and Availability
Grand Mean	2.94	Moderate Functionality and Availability

The implementation issues of the HCAAP encountered by the respondent- beneficiaries

Irrigation and Drainage Component

Diversion Dams

"The Bulao Dam (Dam 2) and Hagbay Dam (Dam 3) are yet to be completed and remain under construction because HCAAP is over. Completion of the remaining 2 dams is now under PIP (Pinipisakan Irrigation Project) which is being subsidized by the national government." It follows that the NIA has to wait for the appropriation of the amount to complete the construction of the said dams.

Irrigation and Canals

The left main canalthat would serve the barangays on the left side of the Catubig River is unimplemented making irrigation water unavailable to the beneficiaries in those said barangays.

However, in the right canal, another problem arose where lateral canals are still to be constructed, "even if there is a main canal, irrigation will not serve other farms and be available to the beneficiaries without those lateral canals."

The same problem occurred in Brgy. San Jorge and the "beneficiaries were compelled to utilize water pumps to get water from the main canal."

Demonstration Farms.

Demonstration farms were established at the outset of the HCAAP in Brgy. Del Pilar to serve the beneficiaries from Brgy. Tagab-iran and Brgy. Hangi; Brgy. San Jorge for the beneficiaries in nearby barangays; and Brgy. Sto. Tomas for Brgy. Magtuad and Brgy. Sulitan. However, "the areas used for demonstration farms were already returned back to the owners of the land for their own farming activities."

Rural Infrastructure Improvement Component

Water Supply

The five barangays covered by this study were not served by the HCAAPs water supply component. Although Brgy. Hangi, Magtuad, and Sulitan had access to potable water, it is part of the projects of Plan International. "The water system of San Jorge was implemented by the local government of Las Navas but not as a counterpart for HCAAP. There were implementations of the water system when the HCAAP was started in Brgy. San Jorge and Hangi but were not continued and presently unutilized." As part of the HCAAP component, water system should be implemented in 20 barangays in the Municipality of Catubig and on 24 barangays in the Municipality of Las Navas.

Agricultural Support Services Component

Farm-to-market road

The9.04 kilometer Las Navas- Bulao-Magsaysay-Hagbay road was completed. However, "the road only served the barangays between the poblacion and Hagbay Dam. It is not available mostly to barangays covered by the HCAAP like Tagab-iran, Magtuad and Sulitan." This confirms the findings of Rodriguez that access to infrastructure could only help, but will not completely eradicate poverty.

Credit Facilities

No credit facilities were established by the HCAAP for the farmers to provide financial assistance for farm activities. This confirms the findings of Tullao and Formilleza that the great majority of the people in the rural area do not have the necessary capital to participate in any innovative undertaking. Hence, only a small group of farmers is able to adopt the new varieties, those with the physical and financial resources required by the new technologies and possibly those with the capability to take advantage of government services and inputs which are limited in quantity. The consequence would be a decline in the income of the small peasants and the increase of income of farmers belonging to the upper income bracket. Government facilities are availed of by bigger landowners and not by the small farmers. The small farmers who are generally illiterate and belong to the subsistence level of poverty do not have sufficient knowledge and information to avail themselves of credit facilities of cooperatives and government banks.

Schistosomiasis Control Component

There were visits from the DOH personnel to barangays covered by the HCAAP to sustain its schistosomiasis eradication campaign. The Regional Health Unit (RHU) of every municipality is now the responsible unit for the sustainability of this component due to devolution of some personnel in the Regional Health Office.

The RHU, together with the Barangay Health Workers of the barangays concerned, administered medicines for the schistosomiasis mass treatments. In Catubig mass treatment is being held in July of every year. Health Education is also conducted but in a rare opportunity.

Public toilets should be implemented in 76 places and Communal toilet in 589 places. Two public toilets still stand in Brgy. Hangi and Brgy. Sulitan. However, "communal toilets could no longer be found in the 5 barangays covered by this study. Communal toilets were either washed out by floods or weathered by time as the housing was made of light materials. The beneficiaries were just given a toilet bowl, pipe, and 1 sack of cement sufficient to cover the hole to be used as septic tank." This confirmed the findings of Manasan that public health, particularly in the rural and poor areas, has suffered most from the severe lack of resources.

Institutional Development Component

Irrigators Association (IA): Only three irrigators association were organized in lieu of the 12 IA's targeted by the HCAAP's implementation. The three IA's are the

following: Pinipisakan IA, Haremasan IA, and Robasan IA. Every IA is composed of 3 or 4 barangays and its names were combined for the name of the association.

Among the three IAs, it is the Robasan IA where Brgy. San Jorge is a part that is well-established. It has functional organization and officers that manifest in the regularity of monthly meetings, sending members to seminars and trainings, providing insurance to farm activities, and giving of seeds to members.

Table 3: Frequency Distribution of Implementation Issues encountered by the respondents

	Frequency	Rank
Irrigation and Drainage		
Dam 2 and 3 are not yet completed	134	1
No Lateral canals	118	2
Left main canal was not constructed	67	3
Multiple Responses	**n=323**	
Rural Infrastructure Improvement		
There was water system at the start but was not sustained	228	1
Could not use ferry landing rack as it is located not in their barangay	162	2
Farm-to-market road is partly unserviceable in rainy season	153	3
No farm-to-market road is constructed from their barangay	147	4
Water system was not implemented	52	5
Multiple Responses	**n=742**	
Agricultural Support Services		
They are not aware of any Research Center	257	1
They were not recipient of any extension activities and training	172	2
Multiple Responses	**n=429**	
Schistosomiasis Control		
They did not see any footbridge in their barangay	174	1
Communal toilets are already destroyed	165	2
They had not seen snail control Being implemented	137	3
No public and communal toilets were put up	115	4
They had seen only once a snail control being implemented	63	5
Multiple Responses	**n=654**	
Institutional Development		
They are not aware of any capability building activities of NGOs and LGUs	206	1
Members of irrigators association rarely meet	117	2
Irrigators association is not functional	109	3
Multiple Responses	**n=432**	

5. Conclusions

Based on the findings of the study, the following conclusions were drawn:

A greater portion of the populace in the Municipalities of Las Navas and Catubig are from the agricultural sector who need the government's support at least with the basic necessities in life.

The HCAAP supposedly was aimed for the development of the rural people especially farmers who are the foremost food producer in an agricultural economy. Nevertheless, this project has to be totally completed as it negates the beneficiaries of the services and facilities it proposed.

Irrigation system and farm-to-market roads have been accessible and available to many but are more beneficial to a few landed families and businessmen. Irrigation system does not significantly affect the respondent-beneficiaries as it is only economically sustainable to those with farm ownership and not with the mere farm workers. The latter as a consequence are not mindful with the role of water as major constraint to high yield and productivity and theirs in maintaining the irrigation facilities for its increasing efficiency in water delivery.

With the completion of the farm-to-market road, businessmen found the agricultural land it traversed appropriate for their businesses and residential sites. As a result, warehouses and residential structures became the scene in the area. Agricultural lands are now threatened of being converted into commercial and residential lands clearly inconsistent with ultimate purpose of farm-to- market roads providing access of produce from farms to market.

Water system for the HCAAP covered barangays have not been sustained as there are problems relating to operation and maintenance. On the non-implementation or poorly implemented water system depends the health of the rural people as they most likely are exposed to diseases for using contaminated wells and unclean sources.

Most of the respondent-beneficiaries are not aware of the function of a Research Center, hence, have no knowledge about sustainable technologies, diversified cropping system and resource management. In these sense, the growth of the growth in this agricultural sector is still largely reliant on the traditional farming technology and inputs. Moreover, the absence of credit facilities adds to the issue on productivity as without capital the respondent- beneficiaries will tend to mobilize farming activities in a lesser area and be satisfied to a commensurate produce.

Schistosomiasis control component is taxed by the shortage of health facilities. The persistence of this endemic disease will impossibly be eradicated and again create havoc in the rural areas, especially the most backward places, where it has the most difficulty in accessing and affording essential health services.

Finally, impoverishment in the rural areas are attributable to the lack of land ownership where respondent-beneficiaries could till the land of their own. Irrigation system has no meaning to a landless farmer where his clutch and retention to the land is always under the pleasure of the landlord. The relationship is biased towards the land owner receiving most gains from the produce of the land and to the farm laborer, it is not enough for daily subsistence plus the fear that it would be his last farming service. Hence, not until a farmer is given a land of his own, whatever rural development projects like this creates accessibility and availability meaningless.

6. Recommendations

Based on the findings of the study, it is recommended that:

1) The NIA should fast track the completion of the Bulao and Hagbay Dams, left main canal, and lateral canals to irrigate the larger remaining service areas.
2) The DOH should provide communal toilets that are concrete permanent to avoid waste of money and time.
3) The DA should establish linkage with financial institutions to help the capitalization needs of the farmers.
4) The LGU should always be a part of sustaining the water system despite its turn-over to the Barangay Water, Health, and Sanitation association (BAHWASA).
5) The government should now implement a genuine agrarian reform program giving land to the landless.
6) This study focuses only on status, and implementation issues of the HCAAP. It did not engage on how the HCAAP's budget was utilized, with the project unfinished, hence, the need for further study.

References

[1] Adanza, E. G. (2006) Research Methods: Principles and Applications. Manila, Rex Book Store.
[2] Alicante, E. L. (1981) "Social and economic sustainability of communal irrigation systems in Iloilo Province." A Masteral Thesis. UPLB.
[3] Balanlay, B. (1997) "Farm Productivity Analysis and Socio-Economic Impact Assessment of Irrigation Programs on Rice Farming in Northern Samar." Unpublished M. S. Thesis. UEP.
[4] Department of Agriculture. Farm-to-Market Road Network Plan.
[5] Formilleza, E. (1998) "Agricultural Growth as a Development Strategy to Poverty Alleviation" Issues in Philippine Economic Development (Manila: De La Salle University Press)
[6] Mallillin, R. B. Sr. "Systems Thinking." A Paper Delivered during the 2nd National Research Congress. UST, Center for Educational Research and Development. April 24- 25, 2003.
[7] Manasan, R. G.(2004) Analysis of the President's budget for 2003: Deficit in Revenues leading to a deficit in services.
[8] Memorandum on HCAAP between JBIC and Executing Agencies of the Project. 2001. Annex III.
[9] National Irrigation Administration. A Training Manual on Irrigation System Management.
[10] National Statistics Office Report. 2004.
[11] Northern Samar Provincial DOH Office (2010) Active Case Finding Report.
[12] Philippine Environment Monitor. (2003) World Bank
[13] Provincial Government of Northern Samar. (2010) Governor's Report.
[14] Provincial Health Office. (2009) Report.
[15] Republic Act 8435 or the Agriculture and Fisheries Act of 1997
[16] Richey,C. B., et. al. (1961) Agricultural Engineers Handbook, McGraw- Hill Book Company.
[17] Rodriguez, F. "Farm-to-market roads: A farmer's journey." Accessed at www.rappler.com.on 2 January 2016.
[18] Rola, Agnes C. (2004) "Research program planning for agricultural resource management: a background analysis," Philippine Institute for Development Studies.
[19] Sen, A. (1999) Development as Freedom. New York, Alfred A. Knopf.
[20] World Bank (1991) World development report. New York, Oxford University Press.