

# To Chew or Nut to Chew: An Ethnographic Study of the Socio-Cultural Role of Betel Nut (*Areca catechu*) in the Life of the Ilocanos

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**Abstract**— The habit of chewing areca has been mentioned in the manuscripts and used as food, medicine, social and religious purposes. The word Areca is derived from Malay word "adakka" or from Ilokano "bua". Areca nut is the fourth most commonly used social drug, ranking after nicotine, ethanol, and caffeine. Areca preparation and specific ingredients vary by cultural group and individual user. Areca nut taken along with tobacco is known to have a deleterious effect of the oral cavity to the extent of causing oral cancer. However, not much is documented regarding the advantage of chewing areca nut. Arecoline, the principal alkaloid in Areca nut, acts as an agonist primarily at muscarinic acetylcholine receptors and stimulating effects of increased well-being alertness and stamina. It is known to improve concentration and relaxation, with other reported effects, including lifting of mood, a sense of well-being, heightened alertness, starving of hunger, aphrodisiac properties and as postprandial digestion. It has been also shown to have cariostatic property direct antimicrobial effect against bacteria, including *Streptococcus mutans*, *Streptococcus salivarius* and various other microorganisms in the oral cavity. **Keywords:** Areca nut.

On the other hand, betel nut is a great factor in the satisfaction of physiological scarcity. This was reflected in the claims of the informants wherein they narrated the story behind their quest for understanding their traditional backgrounds. The subject of the study enhances also the social relationship of every individual in that particular place because it ensembles them in their idle moments after heavy works for life sustenance.

The findings of this study have provided an insight into the culture of the respondents specifically along the traditional understanding of betel nuts and its usage as practiced and experienced. The knowledge generated through the descriptive phenomenological approach enriches the understanding of the betel nut with the potential to benefit scientists, discoverers, researchers, doctors, herbalists, botanists, professionals, educators, and even local folks.

**Index Terms**—Ethnographic, Areca, betel nut, Socio-Cultural, Ilocanos

## 1 INTRODUCTION

One of the concerns of modernity is to liberate man from ignorance and in doing so thoughts attentions are focused on the transformation of a scientific, rationalized society capable of justifying whatever positions it may take. Culture therefore, becomes a framework, a paradigm of looking at reality. It serves as a norm of understanding, of judging a particular point of view.

Traditional use of medicines is recognized as a way to learn about the potential of future medicines. Plants have evolved the ability to synthesize chemical compounds that help them defend against attack from a wide variety of predators such as insects, fungi and herbivores mammals. Many compounds are secondary metabolites generally involved in plant adaptation to environmental stress conditions.

Plants are tremendous source for the discovery of new products of medicinal value for drug development. Today several distinct chemicals derived from plants are important drugs used in or more countries in the world.

Historically, plants have played an important role in medicine. For early people, they are easily to hand, and were intricately connected to diet and or healing. Through observation and experimentation, they learned which plants promoted health and well-being. Throughout history, plants have been of great importance to medicine. ([www.envi.express.com/wildflower.2007](http://www.envi.express.com/wildflower.2007))

The healing properties found in the plants are due to

virtues, vitamins, minerals, and salts contained in them. Some have acid as the citric acid from the fruits, and the malic acid in apples and other fruits. Other acids may be found in herbs. The components of these often supply a need that can restore body to health (A.C. Sas, 2000).

One of the promising medicinal plants that was given attention in the Philippine culture is Betel Nut also known as areca nut which is the seed of the fruit from a palm (*Areca catechu*) belonging to the Palmaceae family.

Betel nut palms originally grew wild in Southeast Asia, perhaps in the Philippines or Malaysia. They were brought to the Indian subcontinent by humans in prehistoric times. The betel nut palm is now cultivated across the Asian tropics as cash crop, as well as in almost every village garden. It is used for its seeds which are chewed as a stimulant.

The betel nut palm is only known in cultivation and its exact origin is not known. It is likely to have evolved in Southeast Asia where it is thought to be very ancient cultivation and where diversity of the genus areca is greatest. The chewing of the seeds is an ancient tradition for millions of people across South and Southeast Asia.

The betel nut grows like cabbage tree, but it is not so big or high. The body grows straight, about 12 or 14 foot high without leaf or branch except at the head. There it spreads

forth long branches like other trees of the nature, as the cabbage tree, coconut tree, and the palm. These branches are about 10 or 12 foot long, and their stems near the head of the tree as big as man's arm. On top of the tree among the branches the betel nut grows on tough stem as much as the coconut do, and they grow 40 to 50 in cluster. The fruit is bigger than a nutmeg and is much like it but rounder.

Betel nut is cultivated primarily for its kernel obtained from the fruit which is chewed in its tender, ripe or processed form.

Betel nut chewing is a masticatory indulgence- ancient, ritualistic and medicinal. The habit of chewing betel nut is a practice of great antiquity. It has been used as food, medicine social religious purposes. The harmful effects of chronic chewing of betel nut have been well established. However, not much documented regarding the advantages of chewing betel nut.

A result of this undertaking will serve as basis for conservation and expository benefits of the betel nut. Further, this will introduce the plant tree to those who do not know yet the significance and its health benefit to people.

This study will contribute in the literature pool by focusing on the lived experiences of old folks including the young's with the intention of providing an improved their knowledge about its effects to health aspects understanding of betel nut as defined, experienced and practiced in the community setting. The outcomes/ results of this research can assist and support new undertakings along the field of biological science, chemistry, socio-cultural aspects and health and allied professions. Also, the findings of the study will improve the community folks a clear picture of the socio-economic impact of the betel nut and later enhanced their knowledge about its effects to health aspects.

## OBJECTIVES OF THE STUDY

The purpose of the study is to explore the social-cultural role of the betel nut in the life of the Ilocanos

Specifically, it aims to:

- 1). determine the reasons influencing the use of betel nut as a "gum" particularly among:
  - a. The elderly folks
  - b. The younger generation
- 2). determine the extent of scientific knowledge of the users on the value and risks of using the betel nut as a "gum"
- 3). capture the social and cultural imprints of the betel nut based on the observed practices, conversations and stories during the "mama" sessions.

## 2 METHODOLOGY

### Research Design

Descriptive phenomenological methodology is used to improve the understanding of betel nut and its applicability to socioeconomic and socio-cultural development. The philosophical underpinnings of Husserl inform this research be-

cause of its descriptive orientation, whereby individuals are seen as the vehicle through which the "essence" of the phenomenon of interest can be accessed and subsequently describe (Sanders, 2003). A phenomenological approach is well suited for this study since the focus is on lived experience from the perspective of the informants, and because little is known about this experience at a time when there is an increased demand on herbal medicines and traditional healings.

### Sources of Data

The municipality of Sanchez Mira in Cagayan Valley served as the place of the study wherein there are lots of betel nut tree found in the municipality and nearby municipalities. Twelve (12) community people (old, young folk) were the informants that saturated the phenomenon under study. They were mostly long timer users of betel nut with different purpose of using. Purposive sampling was done with the assistance of the barangay officials and the barangay health workers of the selected informants.

Code	Sex	Civil Status	Religion	Occupation	No. of years of chewing Betel Nut
01	M	M	Methodist	Farming	26
02	F	S	Catholic	Skilled Worker	6
03	M	M	Catholic	Farming	9
04	M	M	Methodist	Farming	1
05	F	S	Catholic	Self-employed	4
06	F	M	Iglesia ni Cristo	Farming	2
07	M	M	Jesus Crusade	Fishing	8
08	M	M	Methodist	Farming	12
09	F	S	Catholic	Poultry-breeding	5
10	M	S	Catholic	Self-employed	3
11	F	M	Catholic	Store Retailing	15
12	M	M	Jesus Crusade	Farming	11

### Data Collection

After approval, the researchers will ask for a referral from the barangay captain/ officials to identify community people who are long time users of betel nut who could openly narrate, describe its socioeconomic and health related problems.

The interview will be conducted in the community where the phenomenon of the interest occurs. In this setup, the informant will be able to extract experiences that are available in the study. The interview will approximately hold for 30-60 minutes or longer as permitted and as necessary. The informant, however, will give the right to finish the interview process, the researcher provide the informant with contact information should there have been any questions.

### Data Analysis

The Collaizzi methodological approach is used to investigate the phenomena of interest in the study. The seven step data analysis will follow in this methodological approach namely; a) all transcriptions will be read thoroughly by the researchers; b) significant statements will directly pertain to

the investigated phenomenon c) the meaning of the of each statements will be spelled out (formulating meanings) with creative insight ;d) all formulated meanings will be organize into clusters of themes ;e) results will be integrated into exhaustive description of the investigated topic; f) the description of the investigated phenomenon will be formulated into a statement of identification of the fundamental structure; g) informants will be ask about findings thus far in a single interview session.

#### *Ethical Consideration*

All participants received written and verbal information about study purposes, procedures, and benefits of it. Privacy and confidentiality were also considered thus, the researchers have secured those informant's names and any other potentially identifiable information not to be included in any document.

#### *Establishing Trustworthiness and Rigor*

The central goal in maintaining rigor in qualitative inquiry is to correctly represent the participant's experiences as reported (Streubert & Carpenter, 2007). This was achieved through prolonged engagement with data, verification with respondent feedback, use of extracts from respondents' verbatim accounts and peer debriefing. Providing evidence of an audit trail and ensuring technical accuracy in recording and transcribing were strategies used to increase the reliability of the procedures and data generated. Consistent with Husserlian phenomenological method, the researchers under took the process of "bracketing", a common technique used to ensure that rigor is not compromised due to researcher's bias. This was accomplished by first identifying any pre-conceived assumptions and beliefs held about the phenomenon and through journal writing prior to and during the data collection and analysis stages.

### **3 RESULTS AND DISCUSSION**

The three main themes that emerged from the analysis were: 1) The betel nut as defined as used for social and cultural enhancement appraisal approach, 2) The betel nut as defined as means for economic alternatives within the boundaries of survival and, 3) Betel nut as defined as factor in health related problems and medicinal approach.

Theme1. Betel nut as defined as used for social and cultural enhancement appraisal approach.

A dominant feature that emerged from the cross generational aspect of culture has led some anthropologists, especially Kroeber (1917) and Leslie White (1949), to treat culture as a super organic entity existing beyond its individual human carriers. Individuals are born into and are shaped by a pre-existing culture that continues to exist after they die. In its relation to the current undertaking, individuals are much engrossed and endowed with abilities to create and change culture for the better in the same way that culture influences a human being's way of life. Betel nut or areca nut has enriched

the socio cultural aspects of individuals in the community. It has been used for the improvement of cultural status. Betel nut eating is the "rugi ti kankanta, agkatkatawa, nabileg nga mangpasinged ti ginayyem, ken langen-langen...." According to informant 03.

Informants also shared compassion and value system that is one of the important elements in Filipino culture. To understand the complexities of Filipino culture, it becomes necessary to significantly discover and analyse these sub-components which can furnish a relevant picture in the appreciation of Filipino behaviour. In other words, knowing what one value in life and why one value these at all can provide some foundation in the cultivation of an identity as a people.

Informant 02 shared that "malagip ko pay idi ubingak, ar aramiden mi pay nga pagsungka, trumpo, kuryendo ken pagbala ti palsiit" and is supported by informant 10. This point establishes that culture is not only an identity but also a foundation of a true meaning of transcendental development wherein one grows not only because of formal education but also grows within the bound of relationships and camaraderie. Betel nut then enhances the value of "being with other" that cultivates the essence of dynamicity of culture. Culture touches one's lives more than ever and betel nut gives color to ones way of life.

Further, informant 08 shared that "sipud pay adda puot ko, bua ket kanayun/parte ti biagmin, dakami nga sanga-pamilya mangmangan kami bua. Pamedped ti bisin, pagpabara ti bagi nu tyempo lamiis. Dagitay apong mi ket usaren da pay nga atang, nayunanda ti arak, sigarilyo ken dadduma pay nga nakaugalian da nga inayun." Informant 09 added that "bua ket usaren mi nga agas ti bisin ken bannog, aphrodisiac, pagatang mi pay nu tyempo ti minatay." Mamati kami nga dagitay espiritu nga madi makitkita ket daytoy ti kayat da nga maiyatang. This simply picture out that family closeness has been highlighted when somebody shares the idea of partaking the betel nut and in is also deeply rooted in their religious undertaking. It really describes the anthropological perspective wherein culture is descriptive and inclusive. The presence of betel nut is a must in the ceremonial plate, as betel nuts are believed to increase prosperity. The nut is offered to guests, along with a betel leaf, as a mark of respect. As informant 10 and 12 shared that, "nu awan balon mi nga ited nanang weno tatang mi idi, agitugot kami ti bua ta gatangen dagitay memestra kada memestro mi. Malagip mi pay nga adda pinna-contest pay ti kadakkelan nga maitugot na nga bua."

Theme 2. Betel nut as defined as means for economic alternatives within the boundaries of survival.

Informants also believed that culture can be a resource for alternative paths to development. Thus, Filipino culture is in transition from the adherence and practice of the traditional to the modern and industrialized. To quote Hilario Davide:

There was a time when culture was neither seen as an obstacle, nor as a possible ally of development. Culture simply rendered people's lives meaningful. It was a source of identity, of confidence and of self-esteem. It allowed people to understand the world and to define their places within it. Culture

permitted communities and generations to share a common memory. If there was anything that needed to explain itself, certainly it was not culture. It was rather the changes that altered people's lives or destroyed the resource bases of their traditional cultures in the name of developmental programs in which they had no hand. Development itself never offers any explanation; it is its own justification. Its super valuation has meant that its processes and outcomes would remain largely unexamined. It is culture, on the other hand, that must ever explain itself before the tribunal of development.

In a sense, culture is shared, group product, is learned, transmitted from generation to generation, is patterned and integrated, and finally is also dynamic. From that standpoint, areca catechu finds place in religious, social, economic, and cultural functions in the local folks.

Informant 01: Nabayagnak agus usar/mangmangan ti bua'n. isu ti past time ko nu awan ub ubraek. Kada malpas nak mangan, mangan nak ti bua. Naalisto nga pagpapalpa, pagikkat ti umay/suya. Nu mabisin nak ta awan ti sabali nga makan, mangan nak ti bua. Uray nu ibagbaga da nga makapabangsit ti ngiwat ken makamantsa ti ngipen mangan nak latta ta isu ti mangpabara ti bagi aglalo nu tyempo ti lamiis." Further, informant 03 agreed and added that "aglaklako nak pay ti bua, adda umay aging angkat kenyak nga market vendor." Moreover, informant 06 noted that "dakami nga managpuyat, ag nagal-ngal kami ti bua nga nalaukan pay ti gawed ken apog. Ta patyenmi nga isu ti mangpamurmuray kenyami ken mangriing ti matmaturog nga diwa mi."

Filipino people especially the respondents are showing the importance of areca catechu/betel nut in their life. It is embedded already in their blood and flesh. It is to believe that betel nut is not only for socio-cultural transformation but also has a great impact on the economic and productive aspect that safeguards their physiological deficiencies as manifested in their economic status.

Theme 03. Betel nut as defined as factor in health related problems and medicinal approach.

The use of plants and plant products as medicines can be traced as far as the beginning of human civilization. From different culture to the other, medicinal plants are very important in survival and battle for life. People especially folks, men and women are very determined to explore in their own little way the world of development. Rural communities, depend on plant resources mainly for herbal medicines, food, forage construction of dwellings, making household implements, sleeping mats, and for fire and shade. The use of medicinal plants as traditional medicines is well known in rural areas of many developing countries. Folks claimed that herbal plants that grown in their backyards are cheaper yet more effective. In a culture based community, low income people such as farmers, people of isolated villages and native communities use folk medicine for the treatment of common infections and diseases. In this study, betel nut/areca catechu contains large varieties of chemical substances with important therapeutic properties that can be utilized in the treatment of human diseases, however, it was only used in a culture based belief and traditions. The study of betel nut used as folklore remedies

have attracted immense attention in scientific world in an attempt to find possible solutions to the problems of multiple drug resistance due to the existing conventional antibiotics.

According to the World Health Organization (WHO), more than 80% of the world's population relies on traditional medicine for their primary health care needs. The use of herbal medicines in Asia represents a long history of human interactions with the environment. Plants used for traditional medicine contain a wide range of substances that can be used to treat chronic as well as infectious diseases. A vast knowledge of how to use the plants against different illnesses may be expected to have accumulated in areas where the use of plants is still of great importance. The medicinal value of plants lies in some chemical substances that produce a definite physiological action on the human body. The most important of these bioactive compounds of plants are alkaloids, flavonoids, tannins, and phenolic compounds. (Diallo et al., 1999)

Informant 02 admitted that "long time eater nak ti bua ta isu ti ipagarup ko nga nangpababa ti kolesterol ko. Diay kinasugpet na aglalo nu nayunam apog, gawed ken tabako. Naimas isu nga makay-ayo nga kanen. Nu tyempo ti lamiis, pabaraenna ti bagi." This verbal note of the respondent is very much clear that betel nut has been considered as therapeutic agent wherein it is attached deeply to the culture. This claim has been agreed by informant 04 and shared that "saanak pay unay nabayg nga agus usar ngem naibaga dagitay gagayem ko nga agas kanu ti diabetes ken pangpababa ti blood sugar. Idi damo saan ko unay kayat ta napait ngem idi bumaybayag ket nairuamak metten isu nga mayat metten. Idi ket regular nak agpapacheck up ngem idi mangmangannak ti bua, ay ket manmanoak agpadoktoren ta kaya na i-maintain diay blood sugar ko. Ken diay diabetes ko ket isu pay pinaka-maintenance ko. This experience of the informant only shows that the community explored far in terms of their natural resources within their place that enriched their own particular culture, informant 05 expressed that "napait, makapaulaw ngem naimas, magustuak, isu laeng ta makamantsa ti ngipen ngem ti pagaammok ket patangkenen na iti ngipen. Napintas pay nga pagpapudot ti bagi nu tyempo lamiis. Nu mabisinak isu ti pamedped ti bisin. Ammok pay nga dagitay babbaket ken lallakay us usarenda nga pagpurga kadagiti ubbingda. Dagitay lallakay us usaren da pay pagpurga manok da nga texas bago ilaban da ti galleraan."

Informant 07 narrated that "dagitay apongmi idi, pagbalinenda nga gisgis ti ngipen diay ukisna. Adda pay malagip ko nga imbaga da nga pagregreg ti sikog ti babai. Isu nga saan nga advisable kenyada nga masakog. He also adds that "iti istorya dagitay lallakay kada babbaket ditoy, isu ti kinkinnan da idi tyempo ti gubat. Usaren da pay nga agpurga iti dingwen da kada usaren da pay nga agtuba lames." In some instances, the betel nut has been explored widely in terms of its usage and its effects to users. Further, it enrich the culture particularly the immaterial aspect. Informant 08 also believe that betel nut has been used since the early time. He shared that "dagitay tubbog ti bua ket usaren mi nga pagkulay iti daga ken aramiden mi nga dalikan; pagkulay mi pay iti kayo nu agaramid kami ti furniture. Informant 09 shared another story about betel nut. Her family especially her parents

claimed that betel nut is used to lower down cholesterol and blood sugar. However, too much consumption makes them dizzy; "dagitay dadduma ket gapu ti kinabayag da nga agus usar ket agsikkil kanu pay ti dila da. Agrunot ngipen da ken lummabaga ngiwat da gapu daytoy." However, in some other cultures, it adds beauty and improves attractiveness. She also adds that "idi ubbing kami, inusar pay ni nanang ko nga pinagparegla."

### DISCUSSION

The findings of this study support the results of Maji, Jose's et al. (2012) study which states that the results indicate that areca nut contains chemical components that have anti-fungal effect therefore this plant material can be a potential source for developing natural antifungal agents for exploitation of bioactive compounds of plant origin for eco-friendly disease management. Further, Amudhan, Sentil (2012) found out that areca nut seed biochemical compounds have been recently recognized as functionally active molecules, possessing antioxidant, anti-diabetic, anti-allergenic, and other useful properties, as well as exert protective effects against cardiovascular and other diseases. However, it is recommended to know also the underlying mechanisms and type of biochemical compounds involved in this beneficial effect and to ensure these studies, it would enable for utilization in modern medicine.

Utilizing Aristotle's theory of causality in thematic analysis, betel nut and betel nut eating is clearly manifested and embedded within the premise of a wide range and holistic understanding of culture. Betel nut is not only looked as part of social, economic, religious considerations but also taken as part of herbal plants that can cure health related diseases.

For community folks, betel nut is already a part of their life and it adds to their meaningful experiences of their life. The most common use for betel nut is recreational, often as part of social gatherings. According to DIO (Drug Information Online), betel nut chewing can be dated back to the first century C.E. This then supports the claim of the informants that betel nut has been there even before the world war in their own place, thus, a part of their culture. In other words, it has been used since the beginning of civilization. In some net sites, it was noted that betel nut provides an exhilarating stimulant effect and mild euphoria. It also results in strong salivation, which enthusiasts consider a desirable part of the experience. As informants verbally informed that betel nut makes them alert and awake and valiant in cold weather. Thus, betel nut has ability to stimulate the central nervous system; it is also used specifically for its stimulant effects. According to Stephen Fowler (2008), betel nut is chewed by Indonesian long-haul truck drivers to increase alertness.

According to PNG Medical Journal, betel nut has a strong staining effect on teeth, and the lime usually mixed with it to increase the nut's effects may increase wear. However, long-time betel nut chewers have a significantly lower incidence of dental cavities than non-chewers. Further, betel nut also stains the mouth red, teeth black, and may increase the risk of oral cancer, especially when chewed in a mix with tobacco. This findings have supported the verbal experiences of the informants who in their lives actually been encountered.

In addition, according to a study published in 2000 in the British Journal of Psychiatry, betel nut chewing may help people with schizophrenia. Schizophrenia patients who chewed betel nut had milder symptoms and a lower tendency to use harmful recreational drugs than patients who did not use the nut. This suggests that research on betel nut alkaloids may yield useful treatments for schizophrenia however it was noted that betel nut produced side effects of tremors and stiffness. In a cultural social position of the informants, their traditional experience of betel nut has been supported by the statements in the InteliHealth that betel nut may have antibacterial effects, and it was previously included as a toothpaste ingredient for preventing cavities. Because of its toxic effects, however, betel nut is likely useful than other therapeutic agents for dental purposes. And it adds that betel nut tend to produce more saliva that could help people with dry mouth caused by health conditions such as diabetes and Sjogren's syndrome.

The findings show that betel nut contains phytochemicals that can affect various systems in the body. It was verbally shared that it was used to cause menstruation and abortion; it can also cause vomiting and sweating. Thus, it agreed the statement in the health information website Drugs.com that betel nut may be teratogenic, or disruptive to the development of a fetus. It warns pregnant women to avoid chewing betel nut because it can damage an unborn baby's DNA and harm its development.

The NIH (National Institute of Health) links regular betel nut chewing to cancers of the mouth and esophagus. Additionally, compounds in betel nut can encourage the growth of liver, lungs cervix, stomach, mouth, and prostate cancers (www. NIH.com). within the culture of the informants, they did not really look into further understanding of the chemical compounds of the betel nut that they usually chew. However, their point of reference when they claim such is their experiences and the verbal notes of the other community folks who are using/ chewing. The richness of their traditions and customs are not really into phytochemical analysis of such herbal plants which is also the deviation of the current undertaking.

Betel nut/ areca nut has been used for medicinal properties for a long time. It was based on a culture claim and modern technological-pharmacological activities and advancements that phytochemistry presents such as polyphenol, alkaloid, fat, and mineral contents are great source of healing mechanisms. This is the reason why community folks claimed such socio-economic and health-related effects of betel nut/ areca nut. This then will package the holistic understanding of the material and immaterial culture of the people. That the culture is the base and the foundation of every human development and can initiate pharmacological and phytochemical advancements. The flexibility to balance socio-economic resources and its status can also encourage holistic change and development. Thus, in order to attain fulfillment, there should always be changing and broad understanding of the things around or simply the order of things in the ecosystem. The ecology is always there, and it is then the responsibility of every human being to understand and reflect and discover the

benefits of it.

Meanwhile, in the Philippines, the sustainability of the natural resources should be highlighted to be explored and discovered so that the culture behind everything can give every individual the feeling of security and fulfillment.

#### IMPLICATIONS

A value system is one of the important elements in Filipino culture (technology, ecology, economics, physiology, etc.). To understand the complexities and richness of the Filipino culture, it becomes necessary to essentially search and discover and interpret meaningfully these subcomponents which can furnish a relevant package and totality in the appreciation of Filipino behaviour.

Culture, therefore, becomes a framework, a paradigm of looking at reality. It serves as a norm or a basis of understanding, of judging a particular point of view. Modern culture tries to promote a more socio-economic process by enshrining the individual with autonomy, freedom and rationality. This brought about industrialization in the advent of science and technology as a result of human being's domination of culture. Man becomes the center and measure of culture. Because of his/her stable self-consciousness, he/she alone can lead individuals to the promise land of economic prosperity and scientific revolution.

On the other hand, respondents in the present study admitted that betel nut is one of the very important plants that makes their culture rich and also helps them in their economic status. Betel nut is not only a plant that has many uses but is considered a part of their life. In the quest for cultural development, the plant has been studied; analysed, and even tested its chemical contents but the respondents believed that the plant is a source of every individual's satisfaction.

The findings of this study show the richness of their culture; in particular, their traditions, beliefs and their way of living. It presents a wide range of traditional and scientific investigations on the assumptions of truths and philosophical understanding in the nature of reality. The culture of the people is not only focused on survival and dialectical development and understanding of the phenomena but also covers the discovery of something that arouse their cognitive intuition yet noble activity. Further, it also extends not only along physiological satisfaction and economic development but also on health related concerns.

The respondents believed that betel nut in their culture transform many lives. As human as they are, they admitted that betel nut is something to be treasured. Most of them are not ashamed that betel nut can substitute any basic foods in the table. The plant itself is a living example of a fascination with the lush flora of the North.

The results of the study can be a starting point for further research in a certain aspect of traditional and cultural undertaking in other places in the country to verify and confirm the newly acquired information about the subject of study. Further, it encourages research using other methodologies such as quantitative, chemical analysis or integrated researches.

#### 4 CONCLUSION

This study examined the experiences of twelve barangay folks who are eating or chewing betel nut/ areca nut. All the respondents are from Sanchez Mira in Cagayan Valley, where betel nuts are very abundant. The concept of living experience as a research framework assisted in the development of a deeper understanding of the betel nut and respondents' experiences. The lived experiences of the respondents in this study explores the understanding of betel nuts and its relation to culture confirmed that betel nut is not only for physiological satisfaction but also used as medicine for various common diseases. The findings revealed that eating betel nut is not only used for a past time activity, but is deeply rooted in their culture wherein even in the early history of man is already part of their spiritual offerings. This claim of the respondents is similar to the experiences of the early tinguians in Abra in Cordillera that according to them, the spirits need betel nuts for their journey all throughout eternity.

On the other hand, betel nut is a great factor in the satisfaction of physiological scarcity. This was reflected in the claims of the informants wherein they narrated the story behind their

#### REFERENCES

- [1] Amudhan M. et al. 2012. A review on phytochemical and pharmacological potential of areca catechu I. *See*. Review article. *IJPSR*, 2012; Vol. 3(11): 4151-4157
- [2] Ashok Lingappa et al. 2011. Areca nut: to chew or not to chew. Retrieved from: [www.ejournalofdentistry.com](http://www.ejournalofdentistry.com).
- [3] Diallo, D., B. Hveem, M.A. [3] Mahmoud, G. Betge, B.S. Paulsen and A. Maiga. 1999. *An ethnobotanical survey of herbal drugs of Gourma district, Mali*. *Pharmaceutical Biol.*, 37:80-91.
- [4] Sullivan R., Allen, J., Otto, C., Tiobech J., and Nero, K.2000. Effects of chewing betel nut (Areca catechu) on the symptoms of people with schizophrenia in Palau, Micronesia. *British Journal of Psychiatry*, 177,174-178.
- [5] Jose, M. et al. 2012. Antimicrobial properties of (Areca catechu) husk extracts against common oral pathogens. *Research Article*. URL: [www.ijrap.net](http://www.ijrap.net).
- [6] Mueller, I. et al. 2009. Betel nut chewing during pregnancy, Madang province, Papua New Guinea. PNG Institute of Medical Research, PO Box 378, Madang, MP 511, Papua New Guinea.
- [7] Sas, A.C. (2000). *Plants and Health*. Reformation & Herald Publishing Association.
- [8] White, Leslie A. 1949. *The science of culture, a study of man and civilization*. New York: Grove Press.
- [9] Betel nut facts. 2014. Retrieved from: <http://www.druginfo.adf.org.au/drug-facts/betel-nut>
- [10] A review of the systemic adverse effects of areca nut or betel nut. Retrieved from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4080659/>