

**LOCAL KNOWLEDGE  
FOR A SUSTAINABLE DEVELOPMENT**  
*A Case of the Minahasanese of North Sulawesi*<sup>1</sup>

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**IKHTISAR**

*Inti pelaksanaan pembangunan berkelanjutan berwawasan lingkungan yang semakin marak dewasa ini terletak pada pendekatan "grass-root participation" yang tentunya diharapkan dapat lebih menjamin kelangsungan kepentingan dan ukuran subyektif masyarakat dalam mengikuti tarikan pembangunan nasional. Modal utama pendekatan "grass-root participation" adalah adanya perhatian dan penerapan "local knowledge". Hubungan antara pengetahuan lokal dan pembangunan berkelanjutan ini di dasarkan pada fenomena konseptual tentang adanya konflik peta mental dan konflik legalitas dalam kehidupan masyarakat yang sedang membangun.*

*Kasus pada masyarakat Minahasa di Sulawesi Utara diangkat dari hasil penelitian yang dilaksanakan di sembilan desa di wilayah Kabupaten Minahasa pada tahun 1995/1996. Lokasi penelitian dipilih berdasarkan kriteria pokok : karakteristik*

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*geografi, latar belakang etnik/sub-etnik, dan sikap kosmopolitan masyarakat.*

*Terungkap sejumlah aturan adat dalam kehidupan masyarakat Minahasa dewasa ini yang mengandung kearifan lingkungan, yang bertumpu pada anggapan dasar bahwa tanah dan air beserta seluruh isinya merupakan sumber kehidupan yang harus selalu dijaga keberadaannya dan kesinambungan perkembangannya. Nilai-nilai tradisional yang tetap hidup tersebut ternyata tidak selalu bertentangan dengan nilai-nilai baru yang masuk melalui program-program pembangunan. Penerapan pengetahuan lokal justru dapat menjadi mediator penting bagi masyarakat dalam proses adaptasi sosial dan budaya terhadap kehidupan dunia modern melalui pelaksanaan pembangunan yang berkelanjutan.*

**Kata-kata kunci :** *pengetahuan lokal, pembangunan berkelanjutan, peta mental, proses adaptasi sosial dan budaya.*

## **Introduction**

**W**ithin the relation between local knowledge and a sustainable development, two main issues which conceptually or empirically are opposing one another are the conflicting factors of mental maps (between local cultural mentalities and developmental patterns) and the existence of legal conflicts (between common law and formal law legalities). Between both conflicts, the conflict of factors within mental maps and their conflict with legalities of the laws, constitute two matters which are interexpounding one another and occur simultaneously as a logical consequence of social change experienced by a community in a developmental process. Similarly, the conflict between local cultural mentalities and developmental patterns, and between the legality of the common law and the formal law, in fact are reasonable cultural reactions as adaptation activities of the community towards the environmental changes.

It has been recently emphasized to carry out sustainable developmental programs which are environmentally wise either at the national or international level. Slikkerveor (1995: 27) asserted that the international environmental awareness and responsibility were boosted

by the conclusions of the World Commission on Environment and Development Report (1987), recommending, long-term environmental strategies for achieving sustainable development by the year 2000 and beyond. A sustainable development approach, however, argues that real improvement cannot occur in developing countries, unless there are strategies which are formulated and implemented as being environmentally sustainable after the long-term, consistent with social values and institutions and encourage "grass-root" participation in the development process.

The main point of the implementation of sustainable development programs lies in the grass-root participation approach, which certainly in expectation that it should be responsible for the continuity of the subjective interests and measures of the community to satisfy the goal of the national developments. The main factor in the grass-root participation approach is the concern to implement "indigenous or traditional knowledge" to lead regional communities to enter a constellation of Indonesian communities, either at the national or even international level. Indigenous knowledge is acquainted with systems or any practices that are surely related specifically to a certain area, sometimes it is referred to as "local knowledge", "traditional knowledge", or even "commonsense knowledge", which means a knowledge, upon native intelligence of a certain geographic area. These systems or collective social facts might be evolving, but merely superficially, so that the cores are still intact and purely uncontaminated by a "western" oriented scientific or "modern" systems of knowledge and technology. Indigenous knowledge has formed the basis for local level decision making on factors such as human or inhuman health agricultural activities or food production, and natural resources management.

It is in the framework of revitalising local knowledge as a system to support a sustainable development based on environmental wisdom, that this paper is made to be presented at this seminar, through the case of the Minahasa societies, in North Sulawesi.

### **Theoretical Frame Work**

As has been said by Knowles and Wareing (1976) in their theory about "mental maps" which basically is the resultant of

people's interactions with the environment, human beings have constructed their environment to become their living and inspirational sources as well. Subsequently, whenever an individual has been settled down for a sufficiently long period of time in a particular place, he or she will be automatically become part of the ecosystem, and every change that would occur will have reciprocal consequences. Knowles and Wareing have further expressed that on the base of the ecosystem scale and complexity, human beings would construct their cultural landscape building the cultural perceptions subsequently. Based on the cultural landscape and the cultural perceptions, human beings will achieve their image of the environment which will become the very beginning or the source of the forming of the cultural systems and cultural values, and at last their mental maps will be drawn. On the other hand, in a cultural dynamic network, human beings would also construct their cultural values and activities within their lifetime following their own mental maps. The interrelations between human being and the environment will be substantially coloring and even animating the mental map constructions and the cultural development, vice versa.

Environmental change, especially the changes that are induced by the national development - being fundamentally formal and normative - frequently bring about considerable sharp discrepancies between cultural values and the actual behavior of a society. These discrepant phenomena are closely correlated to the existing environmental alterations, resulting from the developmental activities which always involve and even rely on the performances following the regional or national policies. As has been known, almost all decision with regard to regional and rural developments are always made by the upper tier of administration following the available objective data. Any subjective condition of the regional or rural communities in question, are always or frequently forgotten to be accounted. Then, a conflict situation will be aroused between the societal cultural mentalities which have so far been established and are in conformity with every traditional environmental constellations against the patterns of developmental policy and implementations.

Parallel to, the tendencies of the discrepancy phenomenon, it is usually followed by the resulted divergences in the field of legalities toward any conduct or behavior of the related societal members.

There are several customary rules or common laws which actually are still in effect and have been set in opposition with the new rules issued by the formal law which are enforced deliberately to support national development. While the related common law or customary rules that have been effective through generation, and therefore cannot be most likely replaced, particularly because they are strongly integrated in the cultural patterns of the community.

Common laws are rules that have been created along with the other cultural constituents, in such away that they maintained a broad functional network of relationships. Any rule is not merely purposed to uphold an orderly social relationship or economic activities, but it is simultaneously part of the social, moral and even spiritual values that are inherent in a whole intact unity. The entire values which are maintained in those customary rules, commonly possess a long perspective life time. Those values are frequently deeply rooted in the ancestral existences and interests of the ancient ages, which of course have an imaginary relationship with the actual interest in the present time and for the interests of generations in the future. In other words, any affective customary rule has an extent of traditional wisdom which is strongly integrated in the livelihood of the community that supports it.

Conversely, formal laws in the eyes of regional or rural societies are commonly felt to be merely rules that are partially attached and cannot be amalgamated in the whole totality of life. It is difficult for the formal laws to penetrate, or convey a just appraisal to regulate the rights and obligations following their cultural basic values; their existences cannot be denied in the context of a collective unity in a particular aspect of existence and as a nation and subject being of a state. It commonly occurs that antagonistic interests and measures between the two legal systems. Really, on one side people cannot hinder from the objective demand to follow an oriented life toward a national or even a global level, but on the other side people are also human beings who are continually obliged to maintain their subjective interests and satisfactions which are rooted in their local systems and cultural values. It is necessarily to find out a common point of view between both systems in order to establish a dynamic equilibrium in their life.

Similarly too, there are issues of the environmental management and conservation in the context of an increased need to exploit natural resources in the framework of national development program. The history of human relationship in an interaction with the environment is as old as the existence of the cultural development itself. As it has been proposed by Malinowski (1944), fundamentally culture is the human responses to the environment by human beings as an effort to meet their fundamental bio-psychological needs. Instinctively and rationally, human beings cannot release themselves from their interaction with the environment. During the development period of human beings since their intelligence level as mystical until the ontological level and at last their functional level (van Peursen, 1976), the reciprocal interaction between man and the environment is continuously maintained. Successively through generations, every societal unit will accommodate and function environments to fulfill the integrated needs, involving physical, social and, cultural system, or cultural value. Environmental treatments following indigenous knowledge and prudence by various customary rules and other traditions, might be conflicting with the development performances which usually involving objective considerations in favor to the interests of foreign investors.

## **Minahasa Regency and its Community**

### **Geographical Position and Natural Environment**

The area of Minahasa regency lies in the north east end of the Sulawesi island, at the coordinate between  $0^{\circ}8'-2^{\circ}$  North longitude and  $124^{\circ}3'-125^{\circ}$  East meridian. The Minahasa regency cores  $418,920 \text{ km}^2$  or 15.24% of the whole area of the North Sulawesi Province ( $2,748,763 \text{ km}^2$ ).

Due to its geographic position which is not far from the equator; the whole area of the Minahasa regency lies in the tropical climate zone. The average temperature is  $25.9^{\circ}\text{C}$  with an average rainfall of 195 mm and wind rate of 5.5 km/h (1993). Its climatological condition has never been constant from time to time, though the differences is not sharp. In 1981, for instance, the average

temperature reached 30.55°C with the average rainfall of 272.9 mm and wind rate of 2.4 km/h.

Similar to any other region in the province of North Sulawesi, the area of the Minahasa regency lies in the area of the seasonable winds, where between December and April blows the north-west seasonal wind which results in high rainfall. While from May until November the wind blows conversely, it comes from the south-east and results in dry monsoon. The periodically changing monsoons between the wet and dry monsoons, thus being related to the above figures with regard to the temperatures, rainfall, and wind rate; they sufficiently show an equilibrium and they are not much fluctuated. Any alterations of the weather and any other natural symptoms occurring as the consequences of those altering seasonable winds, usually occur without sharp differences.

Ecological environment of the Minahasa regency and the Sulawesi island in general has its own unique natural character, thoring geographical position between two past plateaus which is the Sunda plateau in the west and the Sahul plateau in the east. In the 4<sup>th</sup> of melting ice. Both very large low plateaus drawn from thousands of big and small islands in the Nusantara territory now. This geographic position carries the next consequences to the development of flora and fauna specification thoring the transition from Indo-Malaya zone in the west and the Papua-Australia zone in the east side.

The Minahasa regency area in general consists of vulcanic land becoming a mountainous area or highland. Based on the record there are 16 mountains with its height between 1149 m until 1995 m, two of them, the Soputan (1820 m) and Lokon (1689 m), are active volcanoes. There are also many rivers with strong current. There are a number of lakes or water pockets. In the Minahasa regency there are 8 large and small lakes of 2 until 4278 ha. One of the largest and famous lake is the Tondano lake with its large almost 4500 ha and a depth of 20 m.

Following the facts of those geographical and hydrographical descriptions, it can be concluded that Minahasa the regency has potential natural resources, factually it is revealed through the large variabilities of the vegetation or its flora, which are found covering the entire regional surface (upper and lower plateaus). Elsewhere there are fertile rice fields and farm lands with various food crops

and horticulture in addition to several expanding plantations of coconut, clove, coffee, nutmeg, vanilla. All of them are grown extending from expanding tropical wild lands, descending from the high mountains to the swampy coastal lands which are full of mangrove trees. There are also found many species of tropical fauna and specific animals like anoa, black monkeys, maleo birds, scattered over the entire regional area as wild animals in the jungle and as livestock in the farmyards of the rural regions.

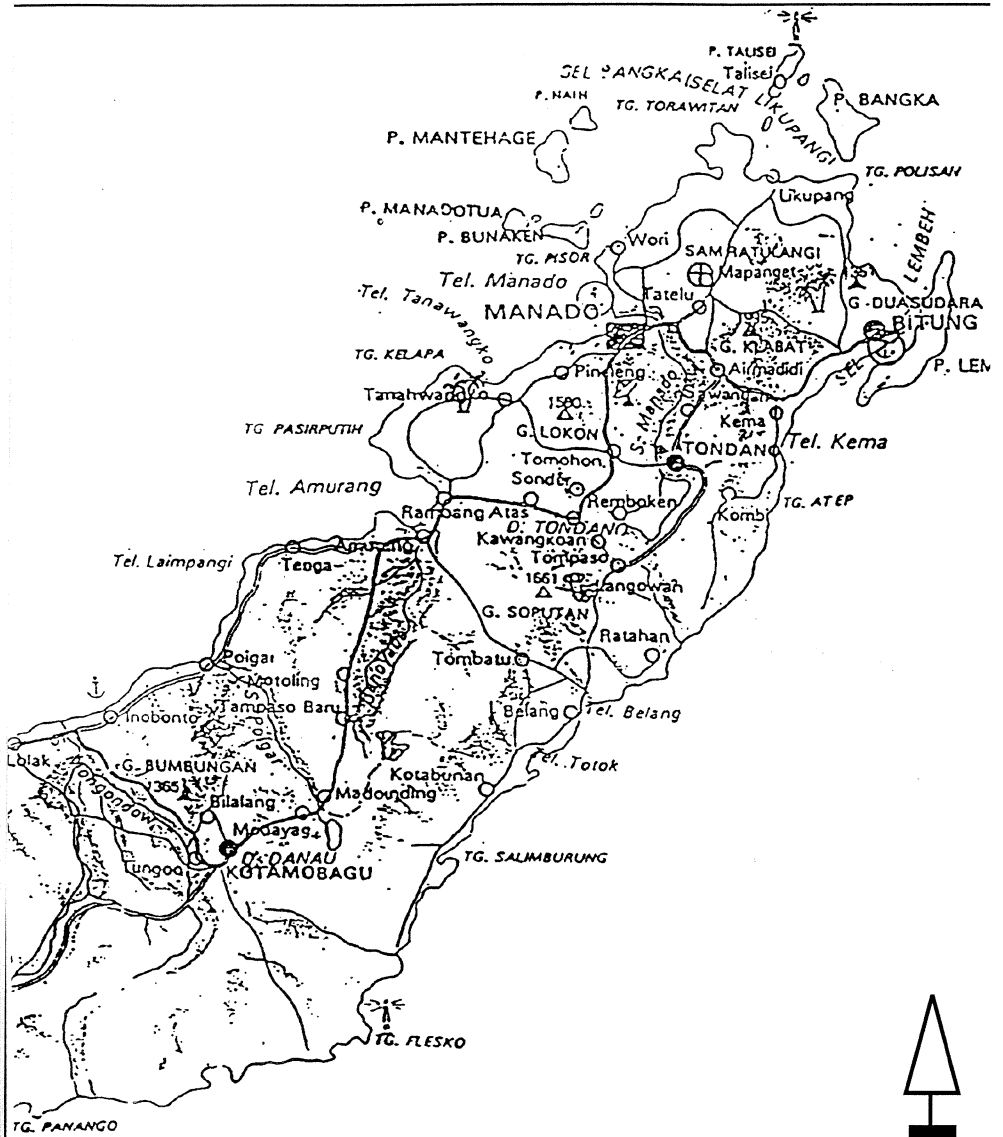
Following the available records are described the spatial use of land with their specifications for dwelling settlements, including housing quarters and farm yards. Land use of farmyards was given priority (40%), next to it is the assigned lands for plantations to be grown with hard crops. Rice and corn fields occupied a smaller portion (4.1%). Those land use patterns are changeable so that from year to year the figures alter. Land use alterations, either by extension or qualitatively can change following the implementation of developmental programs of the related communities.

### **Minahasa Community**

The entire population of the Minahasa regency are 725,711 people (1993), consisting of 369,872 males and 355,839 females. In the same year, the total population of the North Sulawesi province are 2,533,147 people, while the total inhabitants of Indonesia covers 200 million people.

The Minahasanese are one of the four ethnic communities in North Sulawesi, others being the Bolaang-Mongondow, Hulontalo (Gorontalo), Sangihe-Talaut (usually called the Bohusami Community). The Minahasanese include several sub-ethnics which differ their dialectal languages, spoken in their daily lives. According to Adriani (1932) there are two dialectal languages which are used by the Minahasa people as their genuine native language, and one dialectal group of the immigrated people to this region. The two genuine languages are : the Tombulu, Tonse and Tondano dialects belonging to the first group, and the Totemboan and Tonsawang dialects of the second group. While the immigrated group the home Bentenan, Bantik and Ponosakan dialects.





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Following local folk legends, those sub-ethnics are spread over the entire area of the Minahasa regency proportionally to the area that has been divided and determined by their ancestors. The land division was done symbolically on the top of a big stone on the slope of mythological Tonderuken mountain, (which mythologically is known as "watu rerumeran ne Empung", meaning "the stone throne of the ancestors"). Related to the previous mythology, the distribution of land by the ancestors is more familiar by the term "Pinawetengan", which means "the stone where the area division has taken place".

In accordance with the "Pinawetengan" mythology, the land division established the sub-ethnic communities of Minahasa, respectively, being:

- around the Tondano lake for the settlement of the Tondano/Tonlour sub-ethnics.
- the North-East area for the settlement of the Tonsea sub-ethnics.
- the South and South-West areas for the settlement of the Tontemboan sub-ethnics.
- the North-West area to the Tombulu sub-ethnic and South-West of the Tombulu area was given to the Tonsawang and Ponosakan sub-ethnics.
- the South and South-East areas were occupied by the Ratakan sub-ethnic.
- the North-West coastal area was occupied by the Bantik sub-ethnic (Palm : 161 : 56)

Concerning the Minahasa communities, Watuseke (1995), among others hypothesized that circa 6000 years B.C., the area of Passo (Tondano) was already populated by the first Minahasan which belongs to the Proto-Malayan racial group. He said that subsequently several large groups of Indo-Mongoloid communities migrated and settled in the area of Minahasa, inter alia with Philippine groups. While the first inhabitants at the bay areas and the population of Manado city (recent time) were coming from the Old Manado island who had moved to the inland of Minahasa circa 1600 years B.C., and even they had continued to move further until they reach the area south of the Tondano river. Similar to the hypothesis of Watuseke, some other old historians of the Minahasa people, by considering the languages

spoken in those areas, are more inclined to determined that the recent Minahasa people are descendants of the Alifurus or Arafurus ancestors, which, are believed had been really living at one time in the ancient, long ago. Concerning this Adriani (1932) inter alia has carded on various studies about the Minahasa people, especially their language aspects, until he came to his conclusion that the real facts of the Minahasa people have proven that they are of the same descendancy as the Philipines and if they traced more closely, their area is the same as the boundaries of the ancient Austronesians who in the Eastern part of Indonesian Indonesia called the Alifuru or Arafuru tribal people.

There are some interesting relations between the Minahasa people and the Alifuru ancestors in their prominence democracy as it has been proposed by the controlleur of Tanawangko, J.G.F. Riedel, in his work "De vroegere regten en verpligtingen der vrije Alifoeroes van Noord Selebes" (1872), which was quoted by Bert Supit (1991). The Alifuru people (the recent Minahasa people) will never be eminent above others unless he is elected by his tribal people, and anyone who has been appointed as the head of his people, will never have the courage to do something that is important unless it has been approved by the chief of the tribe, after being discussed with the whole tribe. Furthermore, Riedel reported that "all of them had to present in the tribal court as it is their rights and also that they are obliged to attend such courts which cannot be denied to anyone, except if he is physically disabled". Or as it has been concluded by Riedel that "he enjoyment of personal rights and political liberties is highly esteemed by any Alifuru person and it is therefore maintained and defended by each tribal members".

From many things that was described by Riedel (1872) we can draw a vivid picture about the common law that had been applied in the ancient times to rule the daily lives of the Minahasa people. Riedel said, that prior to any social contact that would be entered upon by any Alifuru with outside tribes, they have to be led by their *adat* chieftain. The man eligible to become chief, experienced in the local laws and been accepted as the super human among them, brave and fearless, rich of experienced during war and has adequately managed the tribal customary rules and knowledge about their neighboring tribes. The very group of such men acceptable to have power to rule the community members, and to implement the

customary rules, then are expect to be able to bring forth any matters affecting the people. However, when their shared interests are threatened, especially their tribal interest, then all representatives of the people have to be assembled to discuss the problem explicitly. The people who are given the right to attend the assembly, are adults who have been accepted as the heads of families or households. The important meaning of the assembly is that the chief cannot make decisions prior the approval of the whole community. Decisions that are supported by all members of the community, will be applied and be complied with, legally.

There are some other things related to common law and have attracted Riedel's attention. The fact that personal freedom had always been highly esteemed which shows how concomitantly it had to be in compliance with the shared collective interests, and could - replace sometimes the chief if he had failed to maintain the fundamental values and the community interests, being in conformity with the common laws. The most essential part of the common law of the Alifuru in this case the or recent Minahasanese, following Riedel, lies on their ability to constrain their community members and to comply with their basic rules and their shared collective interests. If there occurs an internal conflict between tribal members, usually a part of them will leave the community, and search for a new place as their new dwelling settlement. This is an effort to maintain the equilibrium within the community members and to prevent any friction that could occur between their interests. Riedel emphasized that any shared common interests dominates the individual interests, especially in connection with land use. When common interests are superimposed upon personal rights in relation to land use, the right of the first user of the land is not considered to be the land owner, because it is assumed that any personal property is also communal property of the whole tribe. Every tribe's member is assumed to have the same right to use land, jungle and other natural resources, which are also claims as the member owners in the community.

## **Environmental Wisdom of Minahasa People**

The facts about environmental wisdom of Minahasa communities described here were discovered during a field research in 1995-1996, in nine villages across the entire regency of Minahasa. Those nine villages were considered to be at least, representing all typologies of rural communities in the Minahasa regency. The selected locations emphasized to the socio-geographical approach, especially its geographic characteristics, income resource (occupation), ethnic background, and cosmopolitanistic attitudes as the main criteria. Selected were coastal villages, in areas adjacent to the lakes, and those which lying in the highlands, which respectively consisted of rural communities having occupations as sea-fishermen, lake-fishermen, rice-field farmers, dryland croppers, hard-crop growers (orchardists), and forest products collectors, including collectors of palmyra products. Those villages were and are still inhabited by various indigenous people who have coming to settle there from other regions (Tidore/Temate/Tobelo and Java-Tondano sub-ethnics), although those villages consisted of traditional communities, they were transitional and open in characters. They wholly illustrated samples of Minahasa people having various mental maps, in the lineaments between aquatic culture (for villages lying adjacent to the shores of the sea and inland lakes), and terrestrial culture of the communities in the highland villages. The studied nine villages were: 1) Kampong Kamenti in the Kapataran village, subdistrict Eris; 2) Village Tounelet, subdistrict Kakas; 3) Village Toulimembet, subdistrict Kakas; 4) Village Kampong Jawa, subdistrict Tondano; 5) Village Teep, subdistrict Langoan; 6) Village Talete 1, subdistrict Tomohon; 7) Village Sawangan, subdistrict Airmadidi; 8) Village Molompar, subdistrict Tombatu; and 9) Village Wanga, subdistrict Motoling.

### **Matrix of the Research Location**

As for the findings in the field it can be asserted that several customary rules are still maintained by the Minahasa people, more or less conveying policies of conserving the environment. The entire

rules or habituals were directly or indirectly correlated with the reciprocal relationship between human beings and the environment, either natural or cultural environment, being still effective, meaning that they are followed with full compliance by every member of the community as a positive law.

Being farmers, the Minahasa people in general still strongly maintain or keep the existence and continuance of the good qualities of land and water in their environment. Land and water and other resources like flora and fauna, are still their natural resources which sustain their daily livelihoods and therefore have to be conserved in keeping the equilibriums. The people of the village Talete 1 in the Tomohon subdistrict, for instance, was found to be still practising "uru", e.g. to place certain warning devices or signs which, made from some material which have been leaded with sorceries or black magic, intended - with the aid of the evil spirits - to harm anyone who destructs or steals the crops or live stocks or anything which was found in the farmyards/homesteads/any piece of land that was watched to be safe from any disturbances. Every member of the communities were aware of the meaning of the "uru" and no one are dared to violate them. The land and water itself - moreover those particularly related with the ancestors - called of "*pasini*" (self owned farmyard to be cultivated), or "*kalakeran*" (communal farmland or family owned farmland), were totally viewed as sacred land and water that could be used for evil minded deeds.

In the Molompar village in Tomohon subdistrict, we found as a rule, that even though the palmyra tree grew on a private owned land (of "*pasini*" or "*kalakeran*"), anyone is allowed to benefit the palmyra products after approval of the land owner, without any obligation to share the products with him/her. Every one knew that no one ever planted the palmyra tree on the land owned. It is assumed that those trees were planted by the ancestors and therefore every descendants of those ancestors have the right to benefit from those trees.

Aquatic Culture	No.	Desa/ Subdistrict	Geographic	Occupations							Sub Ethnic	Cosmo- politanity	Explanation	
				Sea Fisher men	Lake Fisher men	Rise Fields	Dry Land Crops	Hard Crops	Wild Products	Palmyra Products				
	1	Kamp. Kamenti Desa Kapataran Kec. Eris	Sea Shore	#								Tidore + Ternate	Traditional	Migran
Water + Land Culture	2	Desa Tounelet Kec. Kakas	Lake Shore		#	#		#				Toulour	Open	Native
	3	Desa Toulinenbet Kec. Kakas	Lake Shore		#		#	#				Toulour	Transition	Native
	4	Desa Kamp. Jawa Kec. Tondano	High Land			#	#	#				Jawa Tondano	Open	Migran
	5	Desa Teep Kec. Lagoan	High Land			#	#	#				Tontenboan	Transition	Native
	6	Desa Talete I Kec. Toahoan	High Land			#	#	#				Tonbulu	Open	Native
Terrestrial Culture	7	Desa Sawangan Kec. Aimadidi	High Land				#	#	#			Tonsea	Open	Native
	8	Desa Kolompar Kec. Tombatu	High Land				#	#	#			Tonsawang	Open	Native
	9	Desa Wanga Kec. Kotoling	High Land				#	#	#	#		Bantik	Traditional	Native

Those customary rules or customary practices on the ancestor's have always placed every collective interests precedings and personal interests, without restricting any one's activities. They also illustrated the collective lives with neighboring households in connection with the management of their common natural resources. In the Molompar village of the Tombatu subdistrict, almost every homestead was not fenced inclusively. If there were any, they merely functioned to show the border of their respective homesteads and are composed of living fences. If there were any fenced homesteads, than on either side of the garden there would be a door to allow neighbors to enter the yard if they want to get drinking water from the neighbour's well or if somebody needs to pick some herbs planted in the yard for the needed spices or medicines. Generally it was not every house in the village communities where dug wells were. A water well is considered as a collective possession and should be enjoyed collectively too.

As a comparison, the region of Sangihe-Talaud: a habitual practice of "eyak", especially for the coconut trees, planted on the "pasini" or "kalakeran" lands, and even those grow in their own homeyard, have to comply their picking of coconuts collectively 3 or 4 times anually. Anyone picking coconuts in between the two collective picking periods will be punished following the common law and the act will be considered as stealing.

The customary rules of "mapalus" apply in almost all regions in the collective working system. There are some terms that are related to the specific technical system of carrying out the "mapalus". One of them is called the "mapalus defoma", which means that everybody sharing in the collective system has to take with him his own food (*defoma* = food). "Mapalus hari-hari", means that during a certain number of days, the individual who has asked for the community's help, has to provide the food needed. "Mapalus klub" means working together at the public works which are led by one of the community members as group leader. Also well known is the "mapalus masanaendoan" or collective work in the whole day from early in the morning until late in the afternoon, or the "mapalus majaman" that is collective work on fixed hours as previously determined.



## Conclusion

The case of Minahassan Alfuru has shown that traditional values need not always conflict with modern values. In this world of very fast change and development, traditional values become a very important asset for harmonious adaptation. There are two possibilities that change the mental map: either because the direct surroundings are being changed for development schemes, or because the people move to other localities. To detect and study the second case is more difficult than the study of change of the mental maps for a population living generation after generation in a same locality. In this last case, the change has been caused by the change of time, introducing and popularizing new, although mostly still simple technologies. This has been the case with the present people living in the regency of Minahasa, Northern Sulawesi. This could clearly be seen from the fences at the road-side, but keeping the fence of the backyard open, that the old values of mutual - reciprocal communal help, could be continued.

Thus the Minahassan Alfuru managed to accommodate their traditional mental map to the demands of modern life, resulting in a harmonious social life because of the absence of conflict between traditional-indigenous values and modern social and cultural demands, created by the popularization and use of technologies which are never without socio-cultural impact.

## References

- Adriani, N., 1932, *Verzamelde Geschriften, deel 11*, Haarlem, de Erven F. Bohn NY.
- Knowles, R & J. Wareing, 1976, *Economic and Social Geography*, London, William Heinemann Ltd.
- Malinowski, B., 1944, *A Scientific Theory of Culture and Other Essays*, New York: Chapen Hill

- Peursen, G.A. van, 1976, *Strategi Kebudayaan*, Jakarta-Yogyakarta: BPK Gunung Mulia-Penerbit Komisions.
- Regional Development Planning Board of North Sulawesi, 1994, *North Sulawesi in Figures 1993*, Manado.
- Riedel, J.G.F., 1872, "De Vroegere Regten et Verplichtingen der Vrije Alifoeroes van Noord Selebes" TNG 18 (1972) : 157-163, no. 465 KITLV.
- Slikkerveer, L.J., 1995, *A Break-Through in Sustainable Development in Indonesia*, in: *Adaptation and Development*, Bandung: INRIK Padjadjaran University.
- Susanto-Sunario, Astrid & Haryo Martodirdjo - 1996, *Penelitian Pelestarian Lingkungan Hidup menurut Perspektif Hukum Adat, Kasus Kabupaten Minahasa, Sulawesi-Ulara*, Jakarta: BPHN.
- Watuseke. F. S., 1995, *Tahun-tahun dan Peristiwa Penting dalam Sejarah Minahasa*, Manado.