LIVELIHOOD AND ECONOMIC INSTITUTION TRANSFORMATION: A HISTORICAL REVIEW (A CASE STUDY AT COASTAL FISHING COMMUNITY OF UJUNG KULON)

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ABSTRACT

Development program in fishing village has an impact on livelihood and economic institution transformation of coastal fishing community in Ujung Kulon, Banten Province, Indonesia. The research aims to study the livelihood and economic institution transformation occurred in coastal fishing community through historical review related to development process that change the society’s economic system as a whole. Research method used is qualitative research with research type of study case. Research result found that fishing community has undergone livelihood transformation as a part of social transformation occurred as an impact of development. The livelihood transformation consists of livelihood change in some of the society from subsistence farmer and forest product collector into various livelihood societies. Livelihood strategy is applied through multiple livelihood patterns where fishing is combined with other livelihoods. In addition, fisherman households develop livelihood strategy based on the utilization of productive employment in their household (multiple actors or straddling strategy); where each member of the fisherman household has role in the livelihood. Further, fishing community at Ujung Kulon coastal area changes the economic institution as an adaptive mechanism required for society in the social transformation process occurred. The important change on economic institutions is started from economic transaction institution of barter, patron client with traditional norm and patron client with market economic norm.

Keywords: livelihood, Economic Institution, Transformation, Fishing Community, Ujung Kulon

1. INTRODUCTION

Socio-economic dynamic in the village taken place through village economic transformation has been responded by social system in various ways. Global change introduced through development process at the village has affected the fishing community that experienced social transformation including livelihood and economic institution transformations. As part of the society, fishing community at the coastal area experienced modernization of their village brought by development process. Rural development in Indonesia conducted with a political setting took part in the change of development program form conducted by the society, including coastal society. As a whole, rural development conducted in coastal society through rural modernization process had changed the social system of fishing community including social structural system and society institutions. It also included the livelihood of coastal fishing community that generally relies heavily on marine resources. The main focuses of problem in this research were to what extent the livelihood transformation occurs as part of social transformation and how the adaptive mechanism conducted by the societies to adapt their economic institution in order to keep them functional in their livelihood. Therefore the research aimed to study the livelihood and economic institution transformation occurred in coastal fishing community through historical review related to development process that change the society’s economic system as a whole. Social transformation caused by development policies interacted with market introduction with either economic or social orientations tends to influence the economic system of a society. Change in livelihood
system includes livelihood change and economic survival. Further, it affects economic institutions that support the live of the society. The urgency of the research was to give deep understanding on how changes in fishing community as part of development and market system development. The understanding is needed to avoid mistake in planning development program for fishing community.

Theoretically, Chambers and Conway (1991) explained about livelihood idea as follow “a livelihood comprises people, their capabilities and their means of living, including food, income and assets. Tangible assets are resources and stores, and intangible assets are claims and access...a livelihood is socially sustainable...which can cope with or recover from stress and shock and provide for future generations...”. It means that a livelihood system in a society is not static; it will change as a form of tolerance and adaptation that allow individual and group of society to practice their livelihood system through generations. This definition of adaptation has two meanings, adaptive mechanism and adaptive capacity (Dharmawan, 2007). Adaptive mechanism is a mechanism of adaptation applied by individual and household built to adapt with the change in their surrounding environment in order to sustain their life. Adaptive capacity, on the other hand, shows the tolerance power of individual and household needed to harmonize their life in order to survive. Parsons (1937) developed A-G-I-L frame, which is a functional subsystem used to analyze the development process and social system change. A-G-I-L stands for Adaptation, Goal Attainment, Integration and Latent Pattern Maintenance. Adaptation refers to the necessity of a society to adapt toward inflexible and active transformation process of the environment (social system). Goal attainment is a functional subsystem where every act is directed to its goals. The goal means a common goal necessary for the society to achieve. According to means-end scheme, goal attainment is a goal and adaptation is a tool to realize the goal. Integration is a functional subsystem related to interrelation among members in the social system that consists of solidarity level and emotional bond baring the relationship and cooperation conducted to achieve goals. Latent pattern maintenance is a social system developed to establish, maintain, and sustain latent patterns, including motivational incentive and commitment, of its members toward cultural pattern adopted. A-G-I-L model or pattern can be used to compare different stages in the history of a society. The research aimed to study the livelihood and economic institutions transformation occurred in the coastal fishing community of Ujung Kulon using historical review related to the development process that change economic system of the society in a whole.

2. Research Method
The research was conducted at Sumber Jaya Village, Sumur Sub-district, Coastal Area of Ujung Kulon, Pandeglang Regency, Banten Province. The location was purposely selected since the location is the place where fishing community at Ujung Kulon coastal area had undergone social transformation.

The research used qualitative research method useful in detail and deep observation on the nature of coastal society realities that socially built. The research required close relationship between researcher and the society since data and information collection and interpretation will need inter-subjectivity between researcher and the society. Study case research was applied in a community due to several reasons: (1) its appropriateness with explorative purpose of the study, (2) small opportunity for the researcher to control social events or symptoms to be studied and (3) the center of the research was social realities reviewed from the realities.

Data collection method was conducted through observation, in depth interview and literature study. Observation was conducted thoroughly to observe the society as a system having certain aspects and specific relationship and mechanism within the society, which also took place in itself. In depth interview was conducted to several informants from the society and the leaders. Literature study was conducted on theoretical sources and other research cases related to the research.

Qualitative data was analyzed in three steps, data reduction, presentation and conclusion. Data reduction is a selection process focusing on the simplification, abstraction and transformation of written raw data from the field. Presentation is an arranged group of information that gives opportunity to draw conclusion and take action. Conclusion will include verification of the conclusion itself.

3. Historical Milestone of Transformation of Ujung Kulon Fishing Community
Sumber Jaya Village had experienced several historical milestones with significant influence on the social change or transformation occurred. Those milestones brought further impact on
the transformation of livelihood system and economic of the fishing community. In the past, historical record on Ujung Kulon area had existed since 1846 when a German botanist, F. Junghun, collected tropical plants. At that time, flora and fauna in Ujung Kulon were known among the researchers and the journey to Ujung Kulon had mentioned in scientific journal several years later (TNUK, 2009). After that, there were few records on Ujung Kulon until the eruption of Krakatau Mountain in 1883. When the mountain erupted, there were many records describing the dreadfulness of Krakatau eruption that created huge tsunami wave of 15 meter and destroyed settlement in Ujung Kulon and the existed vegetation and wild life. Although the 1883 eruption that swept away the area seemed to end the story of Ujung Kulon; however, several years later it was known that the ecosystem of vegetation and wild life in Ujung Kulon had grown better and faster.

During the Dutch Colonial Era, Ujung Kulon was a research location for Dutch scientist due to its natural capital that considered important and need to be preserved. In 1921, based on the recommendation of the Netherlands Indies Society for the Protection of Nature, Ujung Kulon Peninsula and Panaitan Island was set by the Dutch Government as Preservation Area through the Decree of the Dutch Government No: 60 on November 16, 1921 (TNUK, 2009).

In 1930s, with the determination of Ujung Kulon Peninsula and Panaitan Island as natural space, the areas were isolated from the outside and only interested parties were able to visit them. However, it did not mean that a settlement could not develop in the area and became a village. According to the informant, in 1930s, villages were started to develop around the coastal area of Ujung Kulon including Sumur Village, which is the forerunner of Sumur sub-district and Sumber Jaya Village. The inhabitant was the native people of the area, which was some of people who survived from the tragedy of Krakatau eruption. At that time, fishermen from Labuan (Pendeglang), Carita and Binuangeun migrated to the area. At the beginning, they were only fishing and stopped by at the coastal area; however, overtime, they finally settled in at the area. They were considered as the native people of Ujung Kulon coastal area called urang kulon. The informant stated that during Dutch and Japan colonization, small islands at the coastal area of Ujung Kulon and forests around Honje Mountains were shelters for people to avoid forced labor (rodः or romusha) of Dutch and Japanese colonizers.

In 1937, Besluit Van Der Gouverneur General Van Nederlandch Indie, with the decree No. 17, June 24, 1937 had set that the status of Preservation Area is changed into wildlife reserve area and it includes Peucang and Panaitan Islands. At that time, the population was low and settlement only existed along the coastal line of Ujung Kulon. Now, transportation access is only through the sea and footpath connecting the coastal areas and Cibaliung area.

With the migration of fishermen from Labuan, Carita and Binuangeun had encouraged the activity of create rice field at the coastal area. However, those fishermen were no longer live as a fisherman but they were following local people becoming a farmer and collecting forest product. People started to think about self-fulfillment of their need for rice by creating rice field around the coastal area, which were swamps at that time. No information available on who create the rice field at the first time; however, it existence had brought more people to the village. Thus, fishermen from Labuan decided to settle in at the village and create rice field. The number of rice field was increasing not only at the swamps area at the coastal but until the border of National Park. The existence of rice field had helped local people to self-fulfill of their need on food (rice).

At that time, a footpath connected the village to Cibaliung Sub-district. Villagers marketed forest products they collected to Cibaliung by foot. Occasionally, there were traders from outside the coastal area who came to the area by horse. Horse was a vital transportation tool to carry people needs, especially sugar, salt and textile, from Cibaliung to be traded with forest products, which was the result of the livelihood of villagers at Kampung Sumur. Some of the local people had horses used as transportation tool when they went to the forest to collect honey and other forest products to be traded with rice and other needs.

In 1945s, during the independence era of Indonesia, Kampung Sumur started to build a small port to encourage economic development of the area. The port had important meaning for the economic development of the area and the starting point of societies at the coastal area of Ujung Kulon to know broader market. It had opened and facilitated the exit and entry access to and from the area. Since the determination of Ujung Kulon coastal area as the preservation area in 1921 until the end of the Dutch occupation era and continued with Japanese, the area
seemed to be isolated from the outside world. The existence of transportation infrastructure, such as footpath and horse were unable to encourage economic development of the area. Local people should be independent in fulfilling their needs. There were not many forest products could be marketed with the existence of footpath; however, many goods needed by the people could be carried. It means the flow of economic transaction from and to the area was limited. Things were different when a port was built since it allowed the area to be a transit place for traditional trade boats from outside the area and enabled more economic transaction. The port was also made it enable to carry local resources products in large number to outside area such as Labuan, Serang, Carita and Binuangen. The port had invited outside investors to enter the area and built their business.

Further, the port had made coconut as a commodity with economic value since the traditional trade boats was able to load more copra as processed coconut. In addition to create rice field, the situation had encourage the people to expand their coconut plantation along the coastal area through the Ujung Kulon Peninsula. Copra was marketed in Labuan area and to carry the product, the traders should use tembon (type of sailing vessel). At that time, tembon was vital sea transportation because it was not only carried produce but also people who wanted to go to Panimbang or Labuan area. However, they did not charge people for the transportation. The transportation fee was charged only for the produce carried. An informant described that every time a tembon depart or arrive, there would be a sound of a gong, which was a notification for the people at Kampung, similar to ship’s whistle at present. According to the informant who was studying in one of the Islamic school in Labuan area, he used the transportation to go to school.

With the existence of market and economic transaction with outside parties had brought changes to the local people. They started to know about the economic system of money. Previously, they only used barter in economic transaction, such as exchanging the forest products with goods like sugar, salt and textile. More variation on the economic transaction using money, people started to know the real market system.

In 1958, based on the Decree of the Minister of Agriculture No: 48/Um/1958 April 17, 1958, the status of Ujung Kulon area had change into Natural Spaces Area with the addition of waters area of 500 meter from the limit of the lowest low tide. In 1967, with the Decree of the Minister of Agriculture No: 16/Kpts/Um/3/1967 March 16, 1967, the area of South Honje Mountain of 10,000 Ha along with the east area of Ujung Kulon Peninsula was determined as Ujung Kulon Reserve (CAUK). To facilitate the entrance to the CAUK area, road was built passable for four wheels vehicle that connected Labuan and Cibaliung Sub-districts. However, the road was constrained because there was no bridge at Citeureup Sub-district; therefore the route from Labuan to Cibaliung should take a detour with relatively longer time. Meanwhile, road infrastructure connected Cibaliung-Sumur Sub-district was still a dirt road that made the port was increasingly important for local economy. At that time, electricity was available until Cibaliung Subdistrict – about 15 km from Sumur Subdistrict. In 1979, with the Decree of the Minister of Agriculture of the Republic of Indonesia No: 39/Kpts/Um/1979 January 11, 1979, North Honje Mountain area of 9.498 Ha was included in the area of CAUK.

During New Order era in 1980s, Kampung Sumur became a village. At that time, wider road started to construct passable by two and four wheels vehicle even though it was only dirt road gravel. The road connected Cibaliung Subdistrict with villages at the coastal area of Ujung Kulon in Sumur Subdistrict. The road construction was related to the existence of Ujung Kulon Reserve (CAUK) that received international attention since it was the habitat of one horn rhinoceros, which is a very scarce animal; therefore the preservation received many foreign grants for conservation activities. Through the foreign donation, CAUK was able to expand the area reflecting that Indonesian government paid attention on environmental conservation issue.

Around 1985, the road be paved from Cibaliung to Sumur Sub-district; however, the road at Sumur Subdistrict especially at Sumber Jaya Village that connected with other villages until the settlement at coastal area of Ujung Jaya was still in gravel and it was un repaired until now. During that time, the bridge at Citeureup Sub-district connected Labuan and Cibaliung/Sumur was built; thus, the road and transportation was better and closer. The road construction had changed social life of the villagers. The changes identified with the road infrastructure were:

- Sumur Port had lost its function and being abandoned. Local entrepreneurs considered it was effective and efficient to carry copra and local resources production by land transportation.
• *Tembon*, which was the main transportation tool, was replaced with four wheels vehicle, such as pick up and truck to carry produce and marine products and for transporting people, *pe-es* (minibus) was used. These land transportation had caused more open access for people. The effect was some people migrated to the other areas and on the contrary the population in the area was increasing due to more people came to the area.

• Horse transportation was completely abandoned and replaced by bicycle and motorbike.

• Livelihood of the people in the area started to varies with the emergence of trade and service sectors and some of the people went to Jakarta, Serang, Pandeglang and Cilegon to work.

• Marine and forest products had higher economic value

The road had caused the popularity of *tembon* as village transportation tool decreasing and finally vanished. In the era of 1980s, *tembon* boat had been replaced with motor boat with the migration of Cirebon, Indramayu and Lampung (*Bugis*) fishermen to the area who brought new fishing technology along with new investor in fishery sector. Since then, economy in fishery sector tended to develop faster.

In 1990s, road infrastructure and the change on the status of Cagar Alam Ujung Kulon into Ujung Kulon National Park allowed the development of tourism. In 1992, based on the Decree of the Minister of Forestry No 284/Kpts-II/1992 February 26, 1992 on the change of the function of Honje Mountain, Panaitan Island, Peucang Island and Ujung Kulon Reserve of 78.619 Ha and the appointment of the surrounding waters area of 44.337 Ha located at the coastal area and Ujung Kulon Peninsula the area was set as Ujung Kulon National Park with area of 122.956 Ha. Ujung Kulon National Park area is a protected and natural resources preservation area nationally and internationally recognized as an important and proud area. It is proven by international recognition in 1992 when the Commission of World Heritage of UNESCO decided Ujung Kulon National Park as the Natural World Heritage Site with the Decree No: SC/Eco/5867.2.409 February 1, 1992.

The increasing popularity of Ujung Kulon National Park as a protected and natural conservation area is in line with local government policy trying to create the area as one of tourism central in Banten Province. Natural panorama of Ujung Kulon coastal area offers amazing natural beauty that turns it into beach tourism area. In 2000s tourism facilities started to build in Umang Island and inaugurated in 2004. Umang Island has relatively complete tourism facilities such as hotel and other supporting infrastructures. Although the tourism activities at Umang Island managed by private parties; the development of tourism sector tended to increase when the island has complete facilities. In addition to Umang Island, Peucang and Panaitan Islands are also tourism destination; however, the management of these two islands is related to Ujung Kulon National Park since their area include in the conservation area of Ujung Kulon National Park. Umang Island is a small island located near (across) Sumber Jaya Village and Sumur Sub-district; whereas Peucang and Panaitan Islands are located across Ujung Kulon Peninsula. The development of the two islands as tourism destination had attracted many local and international tourists to visit the areas. According to an informant, international tourists who came to the area were mostly from Russia, Argentina, Romania, Germany, Netherland, Japan and Korea. Whereas, local tourists were mostly came from areas around Banten, such as Jakarta, Bandung, Bogor and Tangerang. Further development, inns and villas started to develop at the villages in the coastal area of Ujung Kulon owned by people outside the villages. The situation had allowed wider area to be covered with electricity until the furthest village of Ujung Kulon coastal area in 2005.

With reformation era, the government had brought autonomy era for local territory and it made the gap between village and state is closer. Local autonomy gave opportunity for society development at Sumber Jaya Village to province and regency government. However, in fact, when local autonomy is implemented, closeness between village and regency is closer and tighter. During this era also, state government created Marine and Fishery Department. The department had institution at province and regency level, which is Marine and Fishery Regional Department.

4. Development Penetration, Livelihood and Economic Institutions Transformation

Livelihood system transformation is the society’s response on the whole society transformation caused by the opening of area and the development of economic life of the local society. From 1930s to 1940s, local people mostly worked as farmer and forest product collector. Even though there were activities to the sea; however, it mostly
only conducted to fulfill the need for side dishes or to exchange the catch with daily needs such as rice, sugar and salt. At that time, fishery resources were abundance and in turn, the catch was also abundance. However, the fish did not have economic selling value since there was no marketing channel. The main livelihood was rice farmer since it considered able to give food (rice) security and saver than fishing in which the catch only to fulfill local need. Whereas, livelihood as a collector of forest product such as honey, sugar palm, rattan, etc. was conducted by local people since the commodities had relatively higher economic value and they could be exchanged with food and clothes product that not locally produced.

Back then, economic activities of the society were relatively simple and subsistence where household unit or family was a production and consumption unit at once. Therefore, the economic institution played role was barter transaction institution. The household needs were fulfilled as much as they can with own production. They, indeed, did not face any problem for fulfilling subsistence needs since forest, land and marine resources were abundantly available and the population who utilized the resources was relatively small.

In 1945s, a traditional port was built at Kampung Sumur. During the time, the main livelihood as fisherman emerged and fish commodities began to gain the market and expanded transaction. The port gave important meaning for the economic development of the society, especially catch fishery sector and it was the starting point for societies at Ujung Kulon coastal area to know about wider market. The emergence of fishing livelihood was related to the following situation (1) marine product, which is fish, had increasing economic value with the existence of wider market (due to the port), (2) the existence of investors who gave fishing capital for the fishermen, (3) the emergence of fish salting and boiled fish businesses. In 1950-1970s when port increasingly gained importance meaning for local economy, more people specialized their job to fishing; however, their work as rice farmer and forest product collector was not abandoned; they were still continued their work. These fishermen mostly worked for fish salting and boiled fish business who was their patron. Economic institutions played role during this time were barter transaction and patron client that based on traditional norms.

In 1980s, the livelihood as fisherman and the economic development of the society in fishery sector showed meaningful development. It was triggered by the migration of fisherman from Lampung, Indramayu and Cirebon into the area that generally brought capital to be developed in the area. On the other hand, road infrastructure construction had also encouraged and fostered livelihood as fisherman. The road had facilitated fish transportation through land and opened new market and in turn, increased the economic value of fish commodity. The development of fishery sector was increasing when the bridge at Citereup Subdistrict connected Labuan and Cibaliung/Sumur was built. The road infrastructure was smooth and the route was closer and allowed fish transportation to other areas such as Labuan, Serang and Jakarta. The situation also encouraged the emergence of fishery businessmen or fish traders.

At that time, livelihood as fisherman was considered to be able to guarantee the survival needs of the household that limited to food and cloth needs. It means that the needs were not varies yet. The fulfillment of necessities of life was increasingly guaranteed with the existence of rice field to fulfill the main needs (rice), forest product and production from coconut plantation that produce copra.

In the development, road was basically took part in the change of livelihood. The change can be interpreted as positive and negative changes. The positive changes were trader, as a livelihood, was increasing especially for fishery product and produce (copra). They were the richest people at the village. In addition, teacher (civil servant) started to enter the village. The road and other transportation tools had encouraged some of the youth to study in higher level, such as junior and senior high school at Cibaliung and some Islamic school at Cibaliung and Labuan areas. Another change on the livelihood was the practiced livelihood as fisherman without any combination with other livelihoods such as farmer. The negative change was the accumulation of rice field ownership. Rich people at the village, who came due to the open access to the area and transportation, started to accumulate rice field ownership by depending on their financial ability.

For the fishermen, road was able to improve their household economy due to the increase of economic value of fish commodity. However, on the
other hand, it caused some of the fishermen losing the ownership on rice field that accumulated by produce traders, who was the upper layer society at the village. Often time capital needed for fishing, buying boat and fishing tools and fulfilling household need during critical crisis due to low catch in famine season had forced them to sell their field. With the open access in to the area and transportation infrastructure surely had made the economic value of fish increasing; however, the number of catch was fluctuated and there was no guarantee that fishermen will have income when their needs were increasing.

Tourism activities had also caused change on the livelihood (1980-1990s). The development of tourism sector had encouraged the development of service sector at the area. The services sector was boat rent, guiding for tourist and housekeeping at the inns or villas. The negative impact of tourism development was identified when farmers started to lose their rice field to people outside the area to build villas. Those farmers who lost their field were forced to change their livelihood into fisherman since they no longer had rice field, as mentioned by the following informant:

**Box 1. Change on livelihood as an impact of development**

Mr. Hil (52 years) was a farmer and owned a rice field near the coastal area. The view from his rice field is so beautiful straight to the sea. It attracted outsider to buy his field to build villa. Mr. Hil was attracted with the offer that gave high price for his field. Finally, the transaction happened. A villa was built on his rice field. With the money from the transaction, Mr. Hil built a house and bought congkreng boat and decided to be a fisherman. Today, Mr. Hil belongs in the pre-prosperous family group at Sumber Jaya Village.

For fisherman, tourism sector was a gift for fishery sector since it brought additional job for fisherman by renting the boat to tourist who visited Ujung Kulon National Park or crossing Peucang Island to Panaitan Island. In addition, the economic value of fish is higher if they sell the fish to the tourist.

From 1990s up to now, livelihood specialization is existed, which is fisherman, rice field farmer, combination of fisherman-farmer and fisherman-service sector, labor and civil servant. However, the majority livelihood is fisherman. The change on livelihood strategy and economic institution is a requirement for society to adapt with the change in their society due to the change on time and social phenomenon. Fishing society experienced and felt the impact of transformation and the change on livelihood system as a response toward social transformation occurred. The change on livelihood system automatically forced fishing community to change their livelihood strategy as an adaptation strategy to maintain the fulfillment of their survival needs. Therefore, fisherman applied multiple livelihood patterns by combining fishing with other livelihoods. This multiple livelihood pattern was applied to overcome difficult situation faced by people who only live as fisherman. In addition, fisherman household had developed livelihood strategy based on the utilization of productive workers within the household (multiple actors or straddling strategy). The multiple livelihood pattern applied among others, fisherman-trader, fisherman-farmer, fisherman-forest product collector and fisherman-service sector. Each member of the household plays role in the livelihood, as explained in the following case:

**Box 2. Livelihood strategy based on multiple actors or straddling strategy**

Mr. SMD (53 years) is a fisherman. He has four children. Two of his children has married and live separately. Whereas, the other two still live with Mr. SMD. His wife is a salted fish maker. Mr. SMD catch (small fishes generally sold with low price) is collected by Mrs. Samad to make salted fish. His son has profession as motorcycle taxi at the village and his daughter is a housekeeper in a villa owned by someone from Jakarta. At the beginning, when members of the household were not empowered to make a living, his family was always in difficulties to fulfill their need. When all members of the family play role in making a living, he is no longer find difficulties in fulfilling his household need and even he is able to save his income and change the tile in his house into ceramic.
Table 1. Historical Review of Society Livelihood Transformation

<table>
<thead>
<tr>
<th>Era/Time</th>
<th>Livelihood</th>
<th>Livelihood Strategy</th>
<th>Economic Institution Plays Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930-1940s</td>
<td>Rice field farmer and forest product collector</td>
<td>Being a farmer was able to guarantee the fulfillment of food (rice) need, fishing activity was used only for subsistence needs. Livelihood of taking and collecting forest product was conducted to be exchanged with food and cloth that do not produced locally.</td>
<td>Barter transaction institution</td>
</tr>
<tr>
<td>1945-1970s</td>
<td>Fishing livelihood started to emerge, farmer and forest product collector</td>
<td>Fishing livelihood was considered to be able to guarantee the fulfillment of survival need of the household since the needs were not varied. The need fulfillment was more guaranteed with the existence of rice field to fulfill the main need (rice), forest product and product from coconut plantation producing copra.</td>
<td>Barter transaction institution and patron client institution with traditional norm</td>
</tr>
<tr>
<td>1970-1990s</td>
<td>Fisherman, farmer, trader, service sector and civil servant</td>
<td>Fishing livelihood was the main livelihood. Fisherman was closely related to patron client institution that considered as a guarantee for the sustainability of business and the fulfillment of fisherman’s needs.</td>
<td>Patron client institution with traditional norm</td>
</tr>
<tr>
<td>1990s-present</td>
<td>Fisherman, farmer, trader, service sector, and civil servant. Combination of livelihood: fisherman-farmer, fisherman-service sector, fisherman-forest product collector, fisherman-trader</td>
<td>Working as a fisherman only was unable to fulfill household needs; therefore, some of the fisherman applied: (1) multiple livelihood pattern; (2) livelihood strategy based on human resources allocation (straddling strategy). All members in productive age were involved in the making a living with different job fields.</td>
<td>Patron client with market economy norm</td>
</tr>
</tbody>
</table>

Livelihood transformation is a requirement for society to adapt with the changes happened in their society based on the change on time and social phenomenon. Along with the transformation, fishing community had formed and developed economic institution system to guarantee the social living of the society as a response in fulfilling the minimum survival needs of the society. Now, the economic institution plays role in the area is patronage economic institution with market economy norm with rational transaction between patron (investor) and client (fisherman). Generally, the fee for working capital was conducted with profit sharing as the following case:

**Box 3. The Case of Patron client with market economy norm**

Mr. H. Ents (46 th) gave capital to two fishermen, one was boat owner and the other was the crew. When they return from the sea and sell their catch, they have to return the capital gave to them and share the remaining profit into four parts, one part was for the investor, two parts were for boat owner and the remaining one part is for the crew.

Further, transformation process is occurred in economic system as a whole, which is a requirement for the society to adapt with active, social transformation process inflexible from the social system itself. The change on economic system as adaptive mechanism is an effort to adapt with the change happened to maintain and harmonize in order to survive. In general, the change on economic
in Table 2

<table>
<thead>
<tr>
<th>Change Analysis</th>
<th>Economic Institution Transformation</th>
<th>Client-patron institution into patron client based on market economy norm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (adaptation)</td>
<td>The change in the institution was an adaptation strategy with the entry of money economy. Barter transaction was conducted when money economy had not penetrated in the life of society; therefore, barter was conducted to exchange marine or forest products with food or cloth needs. When money economy emerged, fisherman was encouraged to increase the catch; thus, more money were needed for working capital and it had created investor function (patron)</td>
<td>With the increasingly strong of money economy value, the rationality of fisherman was increasing. Open access to the area and the emergence of tourism sector required the fisherman to have economic institution that economic rationally accountable</td>
</tr>
<tr>
<td>G (Goal Attainment)</td>
<td>The purpose of household economic activities was no longer to fulfill minimum needs but also secondary needs</td>
<td>The purpose of economic activities was no longer on primary and secondary needs but the demand on tertiary needs emerged, for example household appliances ownership, such as television, mobile phone, etc.</td>
</tr>
<tr>
<td>I (Integration)</td>
<td>Mechanistic solidarity was still exist along with emotional closeness on both types of institution</td>
<td>Solidarity has turned into organic solidarity, loyalty diminished, emotional bond has turned into economic rational bond</td>
</tr>
<tr>
<td>L (latent Pattern Maintenance)</td>
<td>The maintenance of emotional bond, loyalty and mutually beneficial relationship in barter institutions and client-patron institution</td>
<td>Value system maintained is mutually beneficial relationship; however, it is based on economic rationality principle and no longer based on solidarity and emotional bond</td>
</tr>
</tbody>
</table>

5. Conclusion

Fishing community had undergone livelihood system transformation as a response toward social transformation happened as an impact of the development. From 1930s to present, the livelihood system of fisherman had changed from rice field farmer and forest product collector into various livelihoods such as fisherman, trader, service provider and civil servant. Fisherman applied strategy of multiple livelihood patterns where fishing livelihood was combined with other livelihoods. This multiple livelihood pattern was applied to overcome difficult situation for people who only have fisherman as their livelihood. Multiple livelihood pattern applied, among others, fisherman-trader, fisherman-farmer, fisherman-forest product collector and fisherman-service sector. In addition, fisherman household had also developed livelihood strategy based on the utilization of productive worker within the household (multiple actors or straddling strategy). Each members of the fisherman household was productively played role in making a living. Along with the transformation, fishing community at the coastal area of Ujung Kulon had formed and developed economic institution as a requirement for the society to adapt with active social transformation inflexible from the social system itself. The important change happened in economic institution was started from barter economic transaction, patron client institutions with traditional norm and patron client institution with market economy norm. The change on economic institution as an adaptive mechanism was an effort to adapt with the change occurred to maintain and harmonize in order to be survive.

6. References


