INFLUX POLICY RECOMMENDATION: AN INTEGRATED STRATEGY THROUGH SUSTAINABLE LIVELIHOOD APPROACH

Aldi Muhammad Alizar ¹Choerunisa Noor Syahid ²Anas Nikoyan ³

IAP2 Indonesia Affiliate, ²Anwar Muhammad Foundation and ³Anwar Muhammad Foundation, Jakarta, Indonesia

aldi.alizar@gmail.com, c.runisa@gmail.com, nikoyananas@yahoo.com

ABSTRACT

This paper discuss about the influx policy that should be taken by the government. Project-induced-in-migration (or influx) is the movement of people from area outside project-impacted zone to the project-impacted zone. The aim of it is to find economic opportunities and improving quality of their life. Aldi, et.al (2013) stated that the influx has many negative effect especially for the social and environmental aspects in the mining project areas and its surrounding. The three main negative effect that are materialized, (i)the increasing of crime rate; (ii)the marginalization of indigenous people by the immigrant communities; and (iii)the decreasing of public health quality since the mining operation.

Three important actors in development, which are the government as policy makers, the companies as capital modals, and society as the object who affected both directly or indirectly; each of them has their own role play and perception of influx. They also have own solution to cope with the impact of influx in the project areas.

Their role, influence and relation will be reviewed and analyzed with the concept of sustainable livelihood framework. There are five capitals within concept of livelihood assets, which are (1) Human capital; (2)Social capital; (3)Natural capital; (4)Physical capital; and (5)Financial capital. By taking the study cases from Weda Bay Nickel in Eastern Indonesia, this paper found that the main development goals for all of the Development actors is to achieve sustainable development. Unfortunately, technological development in the mining enterprise is leading discrimination and huge gap between immigrant workers and local communities in managing and accessing their assets. The government as a policy maker tends to prioritize the companies as the capital modals. Therefore the process in achieving the sustainable development goals was blurred.

Based on the sustainable livelihood approaches, this paper discuss about how do the local communities strengthen their potential aspects to reduce the negative impacts of influx. They also need to compromise in how to focus on their potential assets and cover the underperformance from the other stakeholders. It expected to provide a new integrated approach for influx-migration policymakers, especially in mining industry areas.

Keywords: Influx migration; sustainable livelihood; mining project

INTRODUCTION

The issue of migration or population movement is an interesting study to be discussed. In several cases, especially in the remote area with mining industry in Indonesia, migration frequently caused problems than benefits. The lack of management from the government and the lack collaboration between stakeholders in managing the flow of migration are the main reasons. The people movement to the project areas frequently categorized as a project-induced in-migration (next will be called as influx in-migration). It is caused by the movement of people to the project areas can be well planned or spontaneous [1]. Furthermore, the definition of migration is the movement process of a person who passed the boundary within the region to other regions, with timescales more than six months. The timescales become an important point to show the permanent resettlement of an individual. Rusli (1995) in [1] also stated that the characteristic of migration is the motion of an individual that involves the territorial and geographical aspect.

In the beginning, many economists experts stated that the case of influx migration has as a positive impact in development. This is because the project-induced in-migration gives an opportunity for the productive-age to work and learn, especially in the mining industry. It is also include the opportunities for migrants to seeking another income and gets some benefits due to project existence [2]. In addition, the project-induced in-migration also stimulates the cultural diffusion processes, which increase the knowledge of local community to the technology progress. They also blend in with the variety of ethnicity, kinship relations, religion and culture at their present residences.
However, today, that economic perspective cannot be accepted. It is because, the growth of local population and influx migration become higher, but it is not supported with the increasing of knowledge and education of local communities. Based on our previous articles which titled Oil and Gas Project-Induced In-Migration Management Plans as Part of A Regional Sustainable Development Framework, it stated there were many problems arise due to the influx in-migration and the most vulnerable impact was felt by the local communities.

This paper will discuss in how to reduce the negative impacts of influx in-migration and the role of each development actors to mitigate it. In here the authors also present comprehensive information in present the negative impact of influx in-migration through sustainable livelihood framework. After the impact was identified, then the authors try to integrate the sustainable livelihood framework with influx in-migration management for recommendation. Through sustainable livelihood approaches, the role of each stakeholders and relation between them can be used for the innovative solution in reducing the negative impacts for the local communities that caused by the influx in-migration.

**Sustainable Livelihood for Sustainable Development**

Usually the concept of sustainable livelihood is used to analyze civil society in the micro context. However, the concept about sustainable livelihood existed to support the sustainable development goals. Challenges and constraints that arise due to the influx migration are needs to be solved immediately. The best approach to cope with this problem is to provide a big picture for those development actors, in how to maintain their resources and to increase their competitiveness without extinguishing their natural resources. It is align with the sustainable development goals, since the sustainable livelihood concept explains about two sides of development. Those two sides of development are natural resources and future development.

Refers to Carney [3] which stated that livelihood is sustainable when it can cope with an recover from stresses and shocks and maintain or enhance its capability and assets both now and in the future, while not undermining the natural resource base. Align with Carney, Chambers and Conway [4] also stated that a livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recovery from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

In addition, Sulistyo [5] stated that livelihood is intensely related within process and linkages of welfare factor in community, either as an individual or group. Usually sustainable livelihood approach is used to identify the constraints and opportunities that faces by the poor. The difficulty which occurred from the influx migration, can be used as a solution as well as a chance to resolve the problems.

Sulistyo [5] also stated that there were four important functions from the sustainable livelihood to analyze influx migration impact, there were;

(i) As an approach, is to assistance the development process in order to achieve community sustainable livelihood.

(ii) As a tool, which is it used to analyze the community livelihoods. It used to address vulnerabilities, assets, structures and processes, strategies and livelihood outcomes.

(iii) As the objectives, it used as the directs of any activities in achieving sustainable livelihoods

(iv) As a set of principles, as the basic principles which can be applied in any situation and context of the issues and activities.

Based on those important functions, then authors are using sustainable livelihood framework as a tool to analyze the impact of influx in-migration and give a solution through those basic principles and approach in a way to achieve the sustainable development goals.

**Sustainable Livelihood Framework**

Although the sustainable livelihood framework usually is used to improve understanding of the livelihood of poor people, but in our perception it also can be used to recognize the vulnerable community. Since the vulnerable community in the influx migration impact is the local community who lives in the surrounding project area and has limit access to improve their life [6]. The sustainable livelihood also can be used for
development planning and assessing for the local government before they issued the policies [4]. Through the sustainable livelihood framework, each stakeholder (which are the development actors) also can play their role as well as their capacity. Following (Figure 1.) is the sustainable livelihood framework process;

Figure 1  Sustainable Livelihood Framework

The sustainable livelihood framework is not works in a linear manner and do not represent the reality. However the sustainable livelihood framework is provide to us in a way of thinking about the livelihoods of vulnerable people. Through the sustainable livelihood framework, it will reflect that there are many factors that affected livelihood and how every points of this framework interact each other. Sustainable livelihood framework can help us in identified the most effective ways to reduce the vulnerable people and support their livelihoods.

People (in this context is vulnerable people) at the sustainable livelihood framework is placed at the center. It is means that people have the most inter-related and influence to the other on the figure. People have five assets (usually it called as “pentagon assets”) that they can access to and use for. Access is also influenced by the prevailing social, institutional and political environment, which affects the ways in which people combine and use their assets to achieve their goals, then it is used for their livelihood strategies [6]. The five components of “pentagon assets” can be used as a guide to help for identifying the priority areas that need to be improved. Herewith the five components:

1. **Human Capital.** This part is including skills; knowledge ability to work; and good health. Those are is important for a person to pursue their livelihood objectives. However, the achievement among person will be different and the strategy that they used also dissimilar. Human capital is required to make used of the four other types of assets.

   To increase the human capital can be both way, direct and indirect. For either case, the human capital can be aims by the people if they are attending to the health and education institution; such as training or school and medical services. However, in the indirect method, the human capital can be achieved by increasing the value, such as helping to open up opportunities to invest in education and health [6].

   In the human capital, the most important thing is that the production of knowledge must be relevant to the future livelihood strategies. The method that can be used to ensure the knowledge is relevant through adopting participatory process in generating the knowledge and complement existing local knowledge. Another way is providing the access to the knowledge. Knowledge sharing with the vulnerable people was delivered a particular problem in the past. Then, need to be considering new options for supporting information, etc. [6]

2. **Social Capital.** In the sustainable livelihood framework, the social capital is taken to mean the social resources that people want to achieve of their livelihood objectives. There are several things to develop through social capital, such as (1) network and connectedness from any others line, (2) membership of a person in formal group that have rules, norms, and sanction, and (3) trust on relationship and communication among the stakeholders. Those three parts are all inter-related and connected each other in any relationship. [6]
Social capital has direct impact to the other four capitals, for examples social network will facilitate innovation; will develop knowledge and technology which is related to the human capital. Another thing through social capital is people can be improving their financial capital through economic relations. Social capital has a particular important to contribute on people well-being. [6]

3. Natural Capital. This part is very important for all or part in sustainable livelihood framework. As the natural resources stock, natural capital is very useful to derive the people livelihood from resources-based activities. None of us would survive without the help of key environmental services and food produced from natural capital. The understanding of linkages between resources remains limited [6]

4. Physical Capital. Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods. The infrastructure consists of changes to the physical environment, which can help people to fulfill their basic needs and be more productive. There are several components of infrastructure that usually used in sustainable livelihoods framework, such as affordable transport; secure buildings; water supply and sanitation management; clean energy, and communication access to gain information. [6]

Participatory approaches are important to establish priority and need for the vulnerable people. The sustainable livelihoods approach focuses on helping for appropriate infrastructure that enables poor people to achieve their livelihood objectives. [6]

5. Financial Capital. It means the financial resources that people use to achieve their livelihood objectives. Financial capital can contribute to consumption as well as production. There are two main sources of financial capital, which are (1) available stocks which are the preferred type for saving. They can be held in several forms such as cash, bank deposits or jewellery; (2) regular inflows of money such as pensions and remittances. [6]

Based on the explanation of the sustainable livelihoods framework, the pentagon assets are derived from people's capacity to survive to cope with shocks and stress. Then the people can improve their material condition to survive at the present and in the future. A livelihood is sustainable if it can cope with, recover from and adapt to stresses and shocks, maintain and enhance its capabilities and assets, and enhance opportunities for the next generation [6]

The Impact of Influx In-Migration in East Indonesia

Generally, the driven factor of migration is economic purpose, such as to find a better job and improving quality of life are the main reason. In Indonesia, the project-induced in-migration frequently occurred in Eastern Indonesia. Since in this region, there are abundant of natural resources and have not been explored. There are two sample of mining company who operated in East Indonesia, there are PT Weda Bay Nickels in Halmahera, North Maluku and BP Tangguh in Timika, Papua. The exploration and production activities of those two sites usually attract migrants to come and seek their opportunities in the project areas and surrounding.

Nevertheless the project-induced in-migration has a huge impact for the region itself, both positive and negative effects. The positive impacts are increasing of local revenue, company’s contribution in increasing the job opportunities could be stimulated the wealth creation through the economic growth for the community in surrounding project areas [2]. However, the negative impacts are quite much than the positive impact that have been faced by those two companies. Herewith the negative impact:

1. Economic Impact

Economic is the most significant factor in influx migration. Economic factor has the positive influence, but this factor also contributed in the negative impact. The worst of this factor is give a domino effect to other factors, such as social and environment. Refers to the mining activities in Weda Bay Nickel and BP Tangguh, the biggest impacts on this field are:

- The increasing of price for basic needs commodities after the influx migration. The rising price of primary goods caused by the increasing demand. For examples, land and housing value become more expensive in the surrounding project area. It is because many migrants are need to have a permanent residence or open a new business.
The increasing number of jobless, since many local people and migrants cannot be accepted in mining sector, meanwhile there is unavailable land for agricultural sector.

The increasing number of unskilled and unemployment in the surrounding project location.

2. Social Impact

As the author stated before, the economic factors have dominos effect to others factors, such as social impact. Herewith several impact in social factors in Weda Bay Nickel and BP Tangguh.

- Loss of safety and security for the community in surrounding project area. It is because the increasing number of unemployment and unskilled labour, tend to increase the crime rate in the project area and surrounding
- Company only want to hire the high-skilled labour which is usually came from outside project area. Then, it give the social envious between the local communities and migrants
- Prostitution and child prostitution in project area become higher as a strategy for them to survive
- Different culture between migrants and local communities become vulnerable into friction. Since the cultural identity in eastern region in Indonesia quite different if compared with migrants (which mostly came from Java Island).

3. Health Impact

Quite similar with the social impact, influx migration also has effect on the health of local people and migrants. The main issues that arise in Weda Bay Nickel and BP Tangguh were;

- The rising incidence of contagious diseases
- The rising demand for clean water supplies (align with health standards)

4. Environmental Impact

Slightly different with others three, the environmental impact in Weda Bay Nickel and BP Tangguh is easier to realize, since the impact perceived directly and visible to see physically, such as;

- Environmental Degradation due to the mining activities and land clearing
- Loss of biodiversity and other natural resources.
- Increasing rates of deforestation and loss of forest resources since the development in the project area
- Reducing price of traditional local crops which affects the availability in food supplies.

Based on the above description, it shows that the problem of influx bring impacts which related to each other and ultimately become cumulative. When this situation occurs, the impacting areas become wider, the stakeholder involved can also more diverse and come from various level of the village, between the village, district or even provincial districts. Delay in the process of solving this influx migration can bring a bad effect, not only for the current, but also a burden for future generations. This is not in accordance with the principles of sustainable development to be achieved by Indonesia in the long term.

Sustainable Livelihood: A New Strategy In Reducing Influx In-Migration

All of the assets in sustainable livelihood are basically possess by all stakeholders. In this context, the assets possessed by multiparty will be share to community in order to maximize their limited assets in responding influx migration. The type and amount of this sharing contributions must be adapted to the stage or phase of development society, namely awareness or social preparation, organization and network development, capacity building, initiatives and activities as well as expansion and sustainability.

In order to ensure this situation works as expectation especially for local communities, together, government and companies jointly facilitating the process of multi stakeholder among the main stakeholders. Thus, ultimately the local community can assess and analyze, plan, implement, and monitor and evaluate joint stakeholder in managing the effects of influx migration.
Livelihood assets emphasis on how individuals or groups cope with stresses and shocks condition which affecting their livelihood by reviewing their assets or capitals. There are five essential components that become a major asset to be accessed by the public in solving the pressure faced by, among others, (1) Human Capital, (2) Social Capital, (3) Natural Capital, (4) Physical Capital, and (5) Financial Capital. This five components often recognize as “assets pentagon” (Figure. 2), which can be used as a guide to help identify the priority areas that need to be improved.

The Integration of Sustainable Livelihood and Sustainable Development

As mentioned before that the sustainable livelihood also contributes to achieve the sustainable development goals. The goal of sustainable development is to reach the harmony between social, economy, and environment. Based on our point of view, the “assets pentagon” in sustainable livelihood framework can be integrated to the sustainable development elements (Figure. 2).

Based on the Figure 2, to achieve the sustainable development goals, it is required to increase the balance between environmental, social and economic. The pentagon asset on sustainable livelihood framework is a method for the vulnerable people to transform their assets and into capitals. In our opinion, the form of social aspect in sustainable development is social capital and human capital. In the other side, for the economy aspect its required to growth the physical capital and financial capital. And the latest, the form for environmental aspect is well managed on natural capital.

a. Human Capital

Human capital becomes an important because it is used as a strategy to achieve society’s livelihood goals. Human capital is used as the basic value which required to utilize four other assets. Are included in the scope of this human capital is the level of knowledge and skills, ability to work, the ability to adapt, level of education, health and nutrition which is owned by an individual. However, the results obtained may vary depending on age, gender, leadership capacity, the ability to process skill, health conditions, and etc. The most important things in order to achieve the ideal of human capital is improved the high-quality education access, delivered comprehensive information, provide friendly access for technology and training, and also give a good nutrition to keep the immune and stay health.

In mitigating the impact of influx migration, the strategy can be used through the human capital modal is to find the main caused, both from internal and external factors. As known, that usually the number of productive-age in local community is quite high. However, in the other hand this number is unsupported with their level of education and skills. At this point, makes the human resources from local communities cannot be captivated by the company. Consequently, many unskilled labours from local community then entered into the informal sector in surrounding project areas.

Through the human capital approach, the government should look widely related to the potential and prospective aspect of the community. Based on this knowledge, the government cannot be taken spontaneous
but they should be seeking the potential points in the society. Planning is a must to do by the government before implement the policies. Empowerment of local communities through capacity building that supported the mining companies also can be done, as long as it is appropriate with local community’s capacity. Participation of local community in developed their regions can be used by the government to mitigate the influx migration and changes it becomes local revenue.

b. Social Capital

In the context of sustainable livelihoods framework, social capital is taken to mean the social resources, especially in pursuit their livelihood objectives [6]. The social capital is developed by network and connections (such as patronage relation, neighborhoods, and kinship), relations of trust and mutual support, membership in formal and informal groups, common rules and sanctions, collective representation, participation as a mechanisms for decision –making and leadership.

The social capital becomes important in the sustainable livelihood assets since it has a direct impact to other capitals. For instance social capital can help people in increasing their incomes by improving the economic relation. It also related to improving the management of common resources (which is natural capital) and shared infrastructure (which is physical capital) [6]. Sharing knowledge through social network also increasing the relationship between social and human capital. In the social capital, there is quite much to learn in building social capital, such as frequently in group activities, assessment for appropriate indicators of group functioning, and the relation between government structure, ideology and level of social capacity in community level. [6]

In the mitigating of influx migration impact, social capital also can be used as the main solution to strength the local community and engagement strategy. Since based on the human capital that has been developed, the social capital will be facilitated to strengthen the community capital, both for the community fellows (bounding) as well as with the strategic stakeholders (bridging). The main reason is to strengthen the community power and trust, and able to get the support and work-relationship between the government and private sectors which associated with it.

Combine of the internal and external power then become a self-sufficient community, especially in managing the influx migration. To make it work properly, then it could be good if it to be institutionalized through multi-stakeholder forum. In addition, in managing this forum then requires a facilitator role in allowing the authentic dialogue among the various parties.

c. Natural Capital

One of the problems that arise from influx migration impact is the access of natural capital for local community. However, through the power of human capital and social capital, then the local community is allowed to manage their various natural capital itself. Based on their own individual capacity, and multi-stakeholder support, it is allow the communities to solve their various obstacles and managing their natural capital, for examples managing the unproductive land or else. In the other hands, the multi-stakeholder collaboration also can be expanding the community access to their natural capital. The government also can give their contribution through provide the government’s land to be managed with sustainable principles by the local community.

d. Physical Capital

The strengthen of human capital and social capital through sharing contribution from multi-stakeholder can ultimate the community in created the physical capital and maximized the natural capital. The physical capital that has been developed through the maximizing the natural capital, such as production supporting, transportation facilities, communication facilities and etc. The creation of physical capital can be build by the community itself independently, or collaborated with other stakeholders, and/or derived from stakeholder support. However, related to the sustainability, the community involvement is necessary. It is because the community also has sense of belonging and willingness to maintain their physical capital. The community participation is important since they are also part of the human capital, even though their natural capital in limited quantities.

e. Financial Capital
The development of four others capital, will bring the increasing of financial capital in the community. The increasing of financial capital is occurred due to the production growth in natural capital which supported by quality of human capital. The skill labour and productive human resources which supported by the social capital (through stakeholder engagement) also increased the financial capital. In addition, in the financial capital, it is allowed to increase the market selling price due to the expanding of market access. The ease access for information and transportation facilities also improved the market price. The financial capital that obtained, can be reinvested for other capitals, especially for physical capital and natural capital. Meanwhile, the increasing of human capital and social capital are expected to get the support from other stakeholder, through multi-stakeholder collaboration.

CONCLUSION & RECOMMENDATION

Based on the five capital, the policies that should be taken by the government not only based on the accident and spontaneous. The things that should remind that in mitigating the impact of influx migration, is not only the government business but also the communities (especially local community) and private sectors (in this point is mining companies). The local community can solve the influx migration impact through the strengthening and development each capital. In addition, the local government and company also need to support the local community to manage and create creatively their potential capital.

The implementation of influx management plan may require the support, participation, and resources of multiple stakeholders. The project should recognize that management of project-induced in-migration is unlikely to become a government priority. The minimum requirements a project commitment to do stakeholder engagement, monitoring and evaluation and response plan, including monitoring of in-migration and potential impacts together with a response plan and definition of project affected people and benefits.

It is related with the core values of International Association and Public Participation (IAP2), that need to be considering the commitment and participation of each particular actor in regional development. Through their involvement, it will develop a good multi-parties collaboration. Companies and government participation also will provide the practical knowledge that can be adopted easily for the local community. Then the impact of their collaboration will be felt directly by the local community, especially in increase their livelihood assets.

REFERENCES