

HUMAN RESOURCES ASSET CONTRIBUTION TO LIVELIHOODS ASSET IN SEMARANG REGENCY, CENTRAL JAVA PROVINCE, INDONESIA

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***Abstract:** Human resources asset is one component of livelihood. The quality of human resources asset will determine sustainable livelihood. The sustainable livelihoods is one of the success factors of development. The research's purpose are: 1) to analyze the profile of human resources asset; 2) assess the contribution of human resources in the form of livelihood asset in the regency of Semarang. The research used survey method. Sampling was carried out by means of random area side. The data analysis which was descriptive, it was shown in tables and pentagon asset figures. The results of the research show that human resources asset are included in the low category. Most of the residents have school education level on the junior high school level. Human resources asset have contributes to livelihood asset.*

***Keyword:** Human Resources Asset, Livelihood Asset. Livelihood.*

INTRODUCTION

Indonesia is one of the countries which have a huge area and the largest population in Southeast Asia. In 2010, the population of Indonesia there are 237.310.800 million people, sex ratio 99.8; about 51 percent live in rural areas (BPS, 2011). Indonesia is not only be the largest and the widest country but also be a country which has the high Total Fertility Rate among ASEAN countries (Sjafii, 2015). The population is a potential human resources. Human resources are the main asset of development. Adioetomo (2005) explains that the increase of working age population will increase the availability of human capital. Williamson (1993, Adioetomo, 2005) was explains that the reduction in mortality, increasing life expectancy, mortality decline will trigger the accumulation of human capital. Further described are also found in the Pacific Rim region, including Indonesia, there has been a deepening of human capital, which means that there have efforts to improve the quality of human resources through investment in education expansion.

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Human resources asset is also called human capital. It is one component of livelihood assets. Livelihood assets is a platform to establish a livelihood. Livelihood assets consists of five components asset, there are human assets, natural assets, physical asset, social assets, and financial assets. Human assets is one of the five components of livelihood assets and have the most important role in shaping livelihood. Livelihood is an access capabilities, assets and activities required to live (Ellis, 1998; Ellis, 2000; Scoone, 1998; Baiquni, 2008; Rijanta, 2010, Hardati, 2014).

Human assets can be to mobilize other assets (natural, physical, social, and financial). How does the human assets contribution against livelihood assets? This paper aims to provide an overview of human resource assets and contribution to livelihood assets in Semarang Regency, Central Java Province, Indonesia. The results of his study are expected to provide an explanation of human resource assets, livelihood assets, and the contribution of human assets on livelihood assets.

LITERATUR REVIEW

The study about livelihood studies had been the main concern of many scholars since the 1970s. This is well reflected in the works of Shave (1972), Hart, (1986), Hardjono, (1987), Ellis (1999), Baiquni (2008), Titus and Burges (2008), Rijanta (2008), Hardati (2013), Hardati, (2014).

Chambers and Conway (1992), they describe livelihood as the capabilities, assets, and activities required for a means of living. Scoones (1998), building on the work of Chambers and other from the Institute of Development Studies of the University of Suseex, came up with a similar definition of livelihood and tied it more explicitly to the notion of sustainable. In dealing with the complexity of a livelihood, Niehoff (2004) proposed a system view toward a livelihood. A livelihood system may comprise the following components. These components are: input, purpose, activities, agency, quality, environment, and locus. A more detailed account on the definition is given by Ellis (2000) that a livelihood comprises the assets (human, nature, physical, social, and financial capital), the activities.

Within the available literatures on livelihood studies, the following principles underpin livelihood approaches (DFID, 2006). Livelihood are: people-centered: the livelihood approach focuses on the poor peoples' priorities, understand the differences between groups of people and work with them in a way that is appropriate to their current livelihood strategies, social environment ability to adapt; responsive and participatory: the approach accommodates the aspiration of the poor so basically listening and responding to the livelihood priorities identified by poor people themselves; multi-level: the livelihood approach work

at different levels in reducing poverty to ensure that micro level reality informs development of policy and an effective enabling environment, and macro level structures support people to build on their own strengths; conducted in partnership: the livelihood approach accommodate multi-partners cooperation among various stakeholders including but not limited to the public and private sectors; sustainability concern: the approach put a balancing position between economic, institutional, social, and environment sustainability; dynamic: the approach recognizes the dynamic nature of livelihood strategies and responding flexibly to people's changing situation.

Human resources became one component of livelihood assets (Ellis, 2000; Baiquni 2008; Rijanta 2010; Hardati, 2014). Human resource is the integrated capabilities of the intellect and physical power of the individual. Dimensions of human resources consist of, age, skills, education, the health of a person (Malloch, 2003). Bloom, Canning and Sevilla (2003) adds that along with the increase in life expectancy will change the view of the man, of man as a factor of production is increased to human assets or human resource assets.

RESEARCH METHODE

The research was located in the Semarang Regency, Central Java Province, Indonesia. Semarang regency is one of the some region in Central Java Province. It's location is in the corridor south of the city of Semarang, the road leading to the city of Surakarta and Yogyakarta. The location is along the highway, and an area of activity centers, industries medium and large. Semarang Regency is an area research dissertation author.

This study is conducted through a combination of method, ranging from literature studies secondary data analysis and primary data analysis. Secondary data analysis is based on local statistics. This is especially related to data at regency and village level for the assessment of various livelihood asset, *i.e.* human resource asset, social asset, natural asset, physical asset, and finansial asset.

The analysis about human resource asset contribution toward livelihood is descriptive, from percent human resource asset to livelihood asset. Contribution Human Resource Asset (cHRA) to Livelihood Asset (LA), explanation as follows.

$$cHRA = HRA / LA \times k$$

cHRA = contribution Human Resources Asset

HRA = Human Resource Asset,

LA = Livelihood Asset.

k = 100 percent

Livelihood asset was analyzed using pentagon asset. Pentagon asset is a visual percentage of assets, and makes it easy to compare these assets. Pentagon asset are image pentagonal each corner indicate access to assets (Ellis, 2000; Hardati, 2014; Hardati, 2015).

Contribution of asset of human resources for livelihoods asset was analyzed in two levels. First, the analysis is generally conducted at the regency level. Both, at the village level, to study the spatial variation.

RESULT

Semarang Regency is one area in Central Java Province of Indonesia. It's location is in the corridor south of the Semarang City, in along the road to the Surakarta and Yogyakarta City. Geographically it is located at the $110^{\circ} 14' 54,75''$ to $110^{\circ} 39' 3''$ East longitude and $7^{\circ} 3' 57''$ to $7^{\circ} 3' 0''$ South latitude.

Administratively, Semarang Regency has 19 sub-districts and 235 village and wards. Its area bounded by six surrounding area. On North, it is bordering the Semarang City, on South is bordered by Boyolali Regency, in the east bordered by the Grobogan and Demak Regency, and on the west it is bordered by regency Kendal and Temanggung.

Livelihood Asset in Semarang Regency

Livelihood asset consists of five components of the assets, those are asset natural resources, physical resources, social resources, financial resources, and human resources. Each of the livelihood assets have different values, and described respectively as follows.

Natural Assets

Semarang Regency has a varied natural asset. Variations of the described natural asset are land area, precipitation, number of days of rain, and water resource availability. In the region there are Mountain Ungaran, Mountain Slamet Mountain, and the Southern slope of Merbabu Mountain.

The total area of Semarang Regency there are 950.2067 square kilometers, or about 2.92 percent area of Central Java Province. It consists of rice area there are 25.663 percent and 74.336 percent instead of the fields there. It is included in the tropical climate region. In 2015, the rainfall year rate was 3,643 mm/year. The temperature ranges between 18-32 degrees Celsius. Wind speeds ranged from 0,37 to 0,71 knots. Air humidity ranged from 38.5 to 98 percent (BPS, 2015 and Analysis).

Semarang Regency has very abundant water availability. There are three sources of water : ground water, surface runoff water, and springs. The ground

water is basin form. There are Ungaran-Boja Basin, Banyubiru-Muncul Basin, and Senjoyo-Salatiga Basin. The surface runoff water is sourced from rivers, lakes, and swamps. There are six main rivers, are river Garang, Bodri, Babon, Jragung, Tuntang, Serang. And one Swamp is Rawapening. Spring exist in all regions.

The potential of natural resources which is owned by Semarang District are a very valuable natural asset, into source a livelihood. For example it can be used for the waterfall tour, swimming pool tourism, natural mountains tourism and agro tourism.

Physical Assets

Semarang Regency have rugged topography, the altitude in the range of 318-1450 meters above sea level (mdpl). Flat area located at 6.49 percent, there is a corrugated region at 60.68 percent, 22.86 percent area there are steep and 9.96 percent very steep area (BPS, 2015, and Analysis).

In Semarang Regency, all of people movement and goods are using the highway network. The existing highway network type sare a higgway, local roads and arterial roads. Highway used to transport heavy, especially the transportation of goods. All the roads crossing the river is already equipped with the infrastructure of the bridge. So that the movement of the population and goods of the people residing in remote location becomes eaiser and smoother.

The Irrigation network used to agriculture needs. Technical irrigation covers 23.37 percent. There are semi technical irrigation 16.50 percent, simple irrigation 31.63 percent, village irrigation are 2.16 percent (BPS, 2015 and Analysis). The existence of the irrigation network is needed for agricultural activities.

Financial Assets

Financial assets consist of regional gross domestic product based on current prices amounted to 334 million rupiah. Every person Spends per person per month of the amount of 761 597 or 761 597 rupiah per person each month . Such expenditures are used to meet the food needs of 49.60 percent and for non - food amounted need to 50.40 percent.

Social Assets

In Semarang regency, social assets include the amount of the sub districts, the number of villages, the number of pillars of residents and neighborhoods, housguard (post jaga), and social institution, such as: family empowerment coaching (PKK). Each unit has a network of social assets for activities and become a place of activity.

Human Resources Asset.

Human resources asset, including the number, age structure, education and health. In 2015, in the Regency of Semarang, the number of inhabitants, there are 933 668 inhabitants. The number of population aged < 15 years : 23.91 per cent, 68.43 per cent aged 15-64 and 65+ age of 7.66 percent. Based on the age structure, number dependency ratio of 46.15. That is, every 100 productive age population, took 46 residents unproductive, 35 came from a young age and 11 from old age.

In the Regency of Semarang, the quality of human resources, views of education and health. The average length of 8.7 years of school. The number of people who completed primary school (primary and secondary) 47.43 percent, graduated from high school 16.26 percent, and 1.97 percent graduated from college. Life expectancy is 72.61 years; infant mortality rate (IMR) 13.19 and maternal mortality rate (MMR) 78.01 (Department of Health; Central Bureau Statistic, 2015; and Analysis).

Five components of asset has a value that varies. The value of each component asset can be in table 1 below.

Table 1
Livelihood Asset in Semarang Regency

<i>Asset Component</i>	<i>Value</i>	<i>Percentage</i>
Human	0.598121	14.85
Social	0.545256	13.54
Physical	0.929156	23.07
Natural	0.981094	24.35
Financial	0.974473	24.19
Total	4.0281	100.00

Source: The Central Bureau of Statistic, 2015 and Analysis.

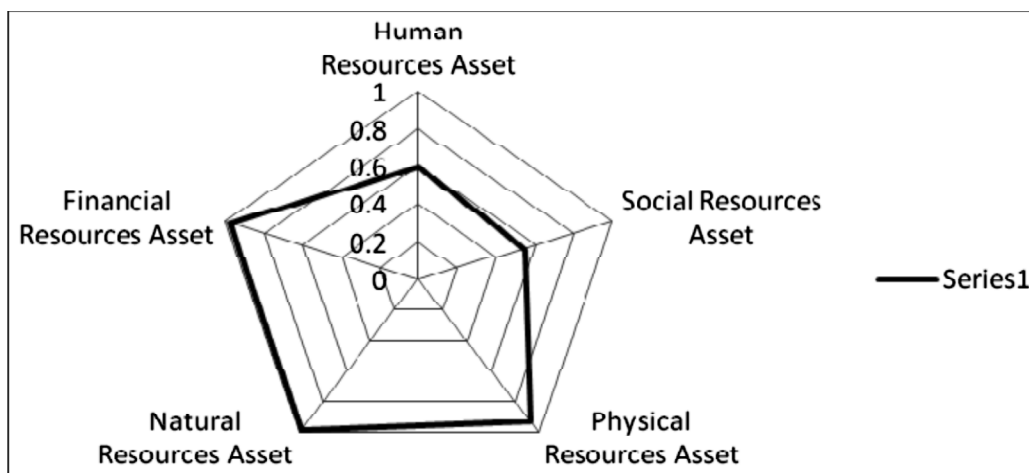


Figure 1: Pentagon Assets in Semarang Regency

Five components of livelihood assets, forming a pentagon asset. Pentagon asset asymmetrical shape, because the sides are not the same length. Theoretically a good livelihood assets, forming an image in terms of five (pentagon assets) long irregular sides equally. This illustrates there is a balance between the five components to build assets, which include asset of human resources, social resources, natural resources, physical resources, and financial resources. Pentagon asset in Semarang district can be seen in Figure 1, as follows.

DISCUSSION AND CONCLUSION

The Contributions Human Resources Asset To Livelihood Asset

In Semarang regency, livelihood assets total value of 4.0281. The livelihood assets consists of five components of assets (human, social, physical, natural and financial), each asset component, value varies. The highest value asset component is 0.98, that's natural assets and the asset value of the low 0,55 namely asset social resources (Table 1). Assets of natural resources has the highest value, this suggests that assets of natural resources contribute most to the livelihood assets. Natural resource assets potentially be used as a basis to form other livelihood assets.

Five components of livelihood assets pentagon described by assets. Based on asset pentagon pictures, each of which has different side lengths. This indicates that the value of each asset (human, social, natural, physical, and financial) has a value not equal (Table 1 and Figure 1). The ideal image asset pentagon long sides together, it shows the value of each asset has the same contribution to the livelihood assets. Human resource asset contribution to livelihood assets amounted to 14.85 percent, meaning that almost one-fifth of assets supported from livelihood assets of human resources. This is due to the education level of the population is still low, the train duration of schooling 8.6 years. School enrollment rates varies by age, namely the age of 7-12 years of 100 percent; aged 13-15 years 95.08 percent; aged 16-18 years was 56.10 percent, and aged 19-24 was 18.40 percent. In addition, there are people aged 65+, who had not completed elementary school.

The assets of human resource contributionis spatial vary. Variations in the human resource asset contribution to livelihood assets spatial examined from four villages, with different rural diversification. The first, village of medium and large industries diversification; second, village of small and household industries diversification; third, village of trade and services diversification; and fourth, village of tourism diversification. The contribution of human resource asset to livelihood asset in the village with medium and large industrial diversification there was 27,14 percent; in the village with small and household industrial diversification there was 23,07 percent; in the village with trading and services diversification there was 25,55 percent, and in the village with tourism diversification there was 25,49 percent (Hardati , 2014).

Conclusion

Component Livelihood asset, has a varying value. The highest value of assets contained in natural resources, and lowest for assets contained in social resources. Each component of livelihood assets pentagon assets formed with side lengths are different, so the asset pentagon shaped irregular pentagon. Human resource asset contribution to livelihood assets amounted to 14.85 percent.

In spatial variations of the human resource asset contribution to livelihood assets. Variations Asset human resource contribution to assets based on the typology of rural livelihoods. In the village with the typology of medium and large industry-based human resource contribution of assets to the highest livelihood assets.

The quality of human resources, views of education, health care, average length of the school year, life expectancy, infant mortality and maternal mortality. Each variable has a value that varies. These variables Should be improved order for Sustainable livelihood can be realized.

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