

# Multiple\_Employment\_Labour\_Resource\_Management.pdf

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*Food Security***MULTIPLE EMPLOYMENT AS A STRATEGY OF LABOUR  
RESOURCE MANAGEMENT FOR SUSTAINABLE FOOD  
SECURITY (CASE STUDY IN PEASANT COMMUNITY OF  
NORTH SUMATRA, INDONESIA)**

Jongkers Tampubolon

**Introduction**

North Sumatra belongs to the regions in Southeast Asia, which suffer from high population density and land scarcity. Most of the farmers in the region cultivate less than one hectare arable land, which is insufficient to form a basis for family subsistence. Members of such farm-households are therefore forced to engage themselves in off-farm activities to generate more income to guarantee their subsistence (see e.g. Kuhnén, 1986 and Leinbach/Smith, 1994).

Albeit multiple employment in farm-household is a world wide phenomenon, which should be understood as an adjustment to changed environmental framework in agriculture (von Frauendorfer, 1966; and FAO, 1998), this aspect is not yet accommodated in the rural development policy of most developing countries. In many cases, "industrial policy has been pursued as an alternative (rather than a complement) to agricultural policy" (Staatz, 1997: 1) or in the opposite direction, "policy maker in developing countries have tended to consider the farm sector as the principle sector for creation of rural employment and income opportunity" (Reardon, 1998: 1).

This paper, founded on empirical research, points out that for farm household with multiple employment, agricultural and non-agricultural sectors are linking on the household level. Based on a case study in peasant community of North Sumatra, Indonesia, the paper goes on to reveal the magnitude of multiple employment, its role as an income source to secure the household subsistence and the reason to choose it as the main strategy of resource management. Further, the policy implication of the empirical finding will be discussed.

### Empirical Background

Information in this paper is based on field research's results in irrigated paddy region of east coastal of North Sumatra. The research was conducted in two villages, one village situated about 2 kilometers from an industrial area (henceforth industrial village) and the other about 25 kilometers from the same industrial area and quite isolated (henceforth non-industrial village). The farm situation in both villages are presented in table 1.

Land scarcity is worse than what is presented in table 1, since 15.5% of household in non-industrial village have no access anymore to land, so that they have to rely their existence on off-farm employment only, and one out of ten farm-households (11.8%) are landless and have to manage farm on totally rented cultivated land. In the industrial village, this proportion is 35% and 34% respectively.

Generally, the farms in both villages are small. This small farm could not be made as a single income source for related farm-household. Therefore, all farm-household in industrial village and almost all in non-industrial village, combine farming with paid off-farm activity (table 2). Such households are called as farm-household with multiple employment, a parallel terminology for multiple jobholding (Fuller, 1983: 8) or pluriactivity (Fuller/Brun, 1990) as well as part-time farming/farmer (Kada, 1980; Lund, 1991 and Bryden/Fuller/Mackinnon, 1982).

**Table 1.** Farm size distribution

Farm Size (ha)	Industrial Village		Non-Industrial Village	
	Average	Proportion (%)	Average	Proportion (%)
< 0.25	0.2	36.0	0.2	35.5
0.25 – 0.50	0.4	22.0	0.4	29.0
0.51 – 0.75	0.6	20.0	0.6	17.2
0.76 – 1.00	0.9	18.0	0.9	9.7
> 1.00	1.4	4.0	1.4	8.6
<b>Population (n)</b>	<b>48</b>		<b>93</b>	

**Table 2.** Agricultural situation in the research villages

Description	Industrial Village	Non-Industrial Village
Average farm size (ha)	0.47	0.49
Proportion of Household without farming (%)	34.72	15.45
Proportion of farm household with multiple Employment (%)	100	94.68
<b>Total Household (n)</b>	<b>72</b>	<b>110</b>

In line with multiple employment categorization by Spitzer (1987) majority of practiced multiple employment in the research villages is household multiple employment. In industrial village, the role of non-agricultural sector to provide employment is already noticeable, since in 51% of farm-household, a part of household economically active members work permanently off-farm. In such cases, agricultural and non-agricultural sector are linking on household level. Whereas 28.6% farm-household in industrial village and 41.3% in non-industrial village belong to category of multiple employment, where all economically active household members are working on their own farm and all of them engage in multiple employment (farming and off-farm linking on individual level). It means the same person holds farm and off-farm work and the work in both sector is carried out seasonally with regular and cyclical pattern. Therefore, there is no competition between both sectors.

The off-farm works are widely varied, but working as agricultural worker is the most favored employment, especially as a second occupation. This phenomenon is applicable for household heads; as well as, household wives and for both villages<sup>22</sup>. Thereafter, petty trader is the other alternative work in non-industrial village. Whereas in industrial village, industrial sector and its supporting system transportation sector have already provided permanent occupation for 19.4% household heads of farm-households with multiple employment (table 3).

It is worth noting, that wages in industrial sector are lower than that in construction and transportation sector, whereas work with the highest wages is work as agricultural worker (especially for harvesting and planting). However, income from own farm (in term of family labour return) is still far higher than income from wages. From this point of view, off-farm employment could be considered as a marginalization process (compare with ISLAM, 1984: 307). Farmer with multiple employment prefer to manage a bigger farm rather than to work off-farm.

Theoretically, the farm-household face two options to utilize the resources they possess in order to increase the household income, namely (i) to intensify the usage of limited land, which is supported by irrigation network, so that the land can be cultivated three times in one calendar year (cropping index 300%), and (ii) to allocate the household labour to engage in off-farm employment.

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<sup>1</sup> It seems that such phenomenon is wide well known in Indonesia (see e.g. Golaszinski, 1986 for East Kalimantan; Arman, 1987 for West Kalimantan and Leinbach/Smith, 1992 for South Sumatra). Junghans/Benad (1984) considered this phenomenon as an effect of agricultural intensification (read green revolution), whereas Golaszinski (1986) shared the opinion, that work as agricultural worker is the easiest work to find (without extra qualification) and this work can be run almost without capital requirement.

**Table 3.** Off farm employment of household heads and wives of farm household with multiple employment

<b>Industrial Village</b>				
<b>Sector of Employment</b>	<b>Main Occupation (%)</b>		<b>Second Occupation (%)</b>	
	HH Heads	Wives	HH Heads	Wives
• Plantation	4.5	-	-	-
• Construction	4.5	-	-	-
• Transportation	7.5	-	3.0	-
• Industry	11.9	1.4	-	-
• Petty trader	-	4.2	4.5	2.8
• Home industry	6.0	9.9	4.5	7.0
• Agricultural worker	9.0	11.3	38.8	32.4
• Others	1.5	2.8	-	-
<b>Population (n)</b>	<b>67</b>	<b>71</b>		
<b>Non-Industrial Village</b>				
<b>Sector of Employment</b>	<b>Main Occupation (%)</b>		<b>Second Occupation (%)</b>	
	HH Heads	Wives	HH Heads	Wives
• Plantation	4.9	-	12.4	2.4
• Construction	8.6	-	2.5	-
• Petty trader	11.1	8.3	11.1	3.6
• Home industry	2.5	1.2	1.2	3.6
• Agricultural worker	1.2	-	29.6	39.2
• Others	2.5	-	8.6	-
<b>Population (n)</b>	<b>81</b>	<b>84</b>		

The most suitable cropping pattern from the viewpoint of agro-economic that is followed by the most farmers is Paddy-Paddy-Soybean. Soybean cropping delivers advantages with it in the matter of the facts, that gross margin positive, improvement of soil quality (legume effects) and soybean plants cover the soil surface so that weed growth could be suppressed, which could reduce the preparation costs for the next planting season for paddy. Nevertheless, only 60% of cultivated area is planted with soybean, the remainder is let to be fallowed until the next paddy cropping.

To put the priority on off-farm (labor resource allocation) rather than on soybean production (farming or land resource allocation) is based on economic decision. Soybean production requires capital (which is not provided by government in the same manner like paddy production), besides soybean farming has risks with it (if in the first week of planting is rained, the

germination of seeds will be prohibited, which leads to the failure of the whole production) and there is no price guarantee, which is reflected in a small family labor return. Whereas off-farm employment, especially agricultural worker; as well as, work in informal sector, could be undertaken without capital and risks as well.

Income generated from off-farm employment plays an important role in both villages, since 72.9% farm-household with multiple employment in industrial village and 65.1% in non-industrial village obtain  $\geq 50\%$  their household income from off-farm activities.

Statistical analyses exhibit that capital expenses per hectare farm do not show a significant relation with off-farm income per capita. This fact leads to the interpretation that the addition income from off-farm activities does not use to promote investment on their own farm (productive objectives). This finding contradicts the study results in some other regions (Klennert, 1986) in Pakistan and Arman (1987) in West Kalimantan). For peasant community in east coastal of North Sumatra, off-farm income are using nothing other than to fulfill their consumption need (food security) as often expressed in the interview, "for meals we get the rice from our own farm and the side dish like fish, meat and vegetable we buy with the money we got from off-farm work". Suppose that household income is already above subsistence line, an additional income will be spent to finance house repairs or education of the children. Investments on own farm take only the fourth or the fifth priority.

The importance of off-farm employment could be seen not only on household level but theoretically also on regional level. In average, off-farm income for farm-household with multiple employment generate addition income equal to yearly farm income of 4.1 *rante*<sup>23</sup> cultivated land in non-industrial village and 4.5 *rante* in industrial village respectively. If during the research period, cultivated area in both villages is 2.02 and 1.67 *rante*, the practice of multiple employment thus has tripled the carrying capacity of rural area.

### Concluding Remarks and Policy Implication

The empirical facts described above could be summarized as follows:

1. In peasant community of North Sumatra, multiple employment is a general persistent phenomenon. Farm-household, which rely their income solely on own farm, is already rare.
2. The magnitude of off-farm sector for employment as well as income generation are significant and far above the average of Southeast Asia as it was synthesized by FAO in "State of Food and Agriculture 1998" (see Reardon, 1998).

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<sup>23</sup> *Rante* is a local term for farm size, where 1 *rante* = 400 m<sup>2</sup> (0.04 ha).

3. The importance of off-farm income is not only to guarantee the sustainable food security on household level, but also to increase the carrying capacity of the rural region to face the pressure of population growth.

In addition, experiences from the finance crisis in Indonesia highlight the role of multiple employment as a stable strategy of labor resource management. During the crises period, August 1997 through 1998, the unemployment and the incidence of poverty did not rise as high as that was predicted. This can be put down to the fact that household could undertake a flexible adjustment to economic shock, through reallocation of household's labor from the sectors that suffered badly during the crisis, such as construction to the sectors, which were benefited from the crisis (Manning, 2000; Berry/Rodriguez/Sandee, 2001; Bresciani *et al.*, 2002).

This situation strengthens the argument for proposing reorientation in agricultural and rural development policy in Indonesia. This reorientation includes:

1. With high contribution to per capita income, multiple employment should be understood as a permanent situation, in which the farm-households make an effort to generate income from two different sources (on-farm and off-farm) to secure the existence of the household. It means, multiple employment is not a transitional phenomenon, as an excess of structural changes process, in term, that the current farm-households with multiple employment will be divided into farmer with big farm and workers, who totally engage in non-farm activity. Experiences in industrial countries refuse the transitional interpretation of multiple employment phenomenon. Bertrand's (1967) prediction, which stated, that "part-time farming is an aspect of the transition from agricultural to an industrial economy" is empirically no longer valid, since the magnitude of part-time farming in Japan (Kada, 1980), USA (Barlett, 1986), Kanada (Kerkemeyer, 1988) and in European Union countries (Fuller/Brun, 1990) are still remarkable.
2. Increasing of peasant income, either for poverty alleviation or for sustainable food security cannot be obtained other than through utilization of the abundance resources (means of production) they possess i.e. labor resources. The most suitable policy measure in line with these objectives is policy that can support simultaneous growth agricultural, industrial and service sectors and which can promote integration among them, in order to create "linkage-friendly" agricultural and non-agricultural activities (compare with Reardon, 1998).

Since the area, which provided off-farm employment is widely varied, development policy, which is based on sectoral transformation (especially single purposed industrialization) is irrelevant for employment as well as income generation of peasant community. Infrastructure development to promote rural

small industry and interregional labor mobilization will create centers of economic activities which further will induce demand on labor in various area, without neglecting agricultural development itself. Such constellation will provide the peasant household an opportunity "to seek the best of two worlds" (Barlett, 1986) or "to balance the potential benefit from on-farm work and off-farm work, since the farmer feels more secure by keeping one foot in agriculture and one foot off-farm" (Arman, 1987). This balance can be reached if and only if agricultural and non-agricultural grow simultaneously in the certain region (regionally structural development)

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