

DEVELOPMENT-POPULATION NEXUS AND THEIR IMPACTS: THE CASE OF NORTH MALUKU PROVINCE

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ABSTRAK

Makalah ini merupakan suatu contoh mengenai hubungan antara penduduk dan pembangunan di propinsi kecil, baik jumlah penduduk maupun luas area, serta kondisi geografisnya yang terdiri dari pulau-pulau kecil. Maluku Utara, pertama-tama dikenal sebagai daerah konflik komoditi rempah-rempah dari beragam kekuatan di masa lalu, Belanda, Portugis, Spanyol dan Sultan Tidore dan Ternate. Kedua, Maluku Utara merupakan Zona Transisi Wallacea, suatu peralihan habitat fauna dan flora Asia ke Australia.

Makalah ini mencoba untuk menilai masa depan suatu provinsi berdasarkan informasi resen bagi pengembangan wilayah dan daya tarik untuk migrasi masuk. Di masa kemerdekaan, Propinsi yang kecil ini menarik minat banyak pendatang dari hampir seluruh Indonesia. Ada area-area pertambangan yang sebagian masih dalam tahapan eksplorasi, ada pula yang telah memulai eksploitasi. Pemekaran kabupaten-kabupaten lama menjadi kabupaten-kabupaten baru juga tidak kalah menarik bagi para pendatang untuk membuka usaha atau memperbesar peluang berusaha. Namun, dalam Propinsi yang kecil itu, ada kegelisahan di benak banyak kalangan pemerhati maupun penduduk asli. Dampak yang sudah mulai nampak dan mungkin intensitasnya semakin tinggi di masa depan dapat menimpa segi-segi kehidupan fauna dan flora serta masyarakat setempat. Aspek ekonomi, kesehatan, disharmoni relasi etnis, dan ancaman terhadap kekayaan dan kehidupan fauna dan flora yang spesifik propinsi itu adalah beberapa di antara dampak yang mengemuka di sana.

Kata kunci: Penduduk, Pembangunan, Migrasi dan Dampak

INTRODUCTION

The Province of North Maluku (Maluku Utara) is one among a few provinces all over Indonesia with its area is consisted of scatter, small islands. In the sixteenth and seventeenth century, the islands of North Maluku had an international importance as the original Spice Islands. It was recorded that the region was the sole source of cloves. The Dutch, Portuguese, Spanish and the local sultanates of Ternate and Tidore seriously fought to control the lucrative trade of these spices (Indonesian Tourism Forum, 2011).

The northern part of the Maluku Islands is the location of four major sultanates. They have no longer hold official or political power but still hold enormous cultural respect. They are the Sultanate of Ternate, Tidore Sultanate, Bacan Sultanate, and Jailolo Sultanate.

North Maluku is a province of northeastern Indonesia. It covers the northern

part of the Maluku Islands. Historically, it was part of the former Province of Maluku which used to cover the entire group until North Maluku was split off in 1999. The former provincial capital is Ternate, then was moved to Sofifi, on Halmahera, its largest island.

This paper attempts to assess the future of the province within the current trends in development of the region and its potential attraction to the in-flux migration. Section II is devoted to describe selected geographic importance of the province. Section III presents a short description of its administrative divisions, their coverage area (km²), and the population size in 2005 and 2010. Section IV is a glance description of the in-migration, based on the census data and a recent field survey.

Section V is a description of several sectors of the local economy, their current attractiveness and the potential development in the coming years. Section VI is the result of analysis, based on the preceding sections with

specific attention to the impacts of the in-flux migration, in general, to selected aspects of interest.

The paper emphasizes the potential impacts in the future for a variety of dimensions both for the specificity of its natural resources, that is the environmental components and for the social components as well. The objective of an impact assessment in its relation to development, especially for investment, is intended to manage the situation in order to provide better conditions for the safety of investments and for the safety of people who are living in the area. The impacts may be incorrect if the assumptions and the confounding factors are different with those under the author's considerations.

THE GEOGRAPHIC IMPORTANCE ⁱⁱ

The islands of North Maluku are mostly located in a volcanic region. There are the volcanoes of Dukono on Halmahera, Gamalama on Ternate island, the most active one until now. The Tidore island is situated in a large stratovolcano, and in November 2011 the epicentrum of a mild earthquake was recorded in Bacan islands.

The World Wildlife Fund (WWF) stated that the rainforests of Halmahera, Morotai, the Obi Islands, the Bacan islands and other islands of North Maluku belonged to what they called the "Halmahera rainforest secoregion". These areas become the home of a number of unique plant and animal species to the islands, which are situated in the Wallacea transition zone. This area is suitable for a mixture of species of Asian and Australasian origin. The predominant trees of the forest are Anisoptera thurifera, Hopea gregaria, Hopea

iriana, Shorea assamica, Shorea montigena, Shorea selanica, and Vatica rassak.

Several endemic mammals was found here. The most dominant among them are the Obi mosaic-tailed rat (Melomys obiensis), Masked flying fox (Pteropus personatus), and three arboreal marsupials, the Ornate (Phalanger ornatus), Rothschild's (P. rothschildi), Blue-eyed (P. matabiru) and Gebe (P. alexandrae) cuscuses. Until recently, these small islands have over two hundred different birds, twenty-six of which are endemic. The endemics include four birds which are the only species in their genera, including the elusive Invisible Rail (Habroptila wallacii), the White-streaked friarbird (Melitograis gilolensis), and two birds of paradise, the Paradise-crow (Lycocorax pyrrhopterus) and Wallace's standardwing (Semioptera wallacii). The islands are also home to the largest bee in the world, Wallace's giant bee (Megachile pluto).

THE ADMINISTRATIVE DIVISION AND POPULATION

As the map in page 3 indicates, the province of North Maluku is currently composed of nine Districts / Cities after refraction or re-district: (i) the former capital city of Ternate, in Ternate island, (ii) the Tidore islands with its largest terrestrial area in Halmahera island, (iii) district of West Halmahera, (iv) district of North Halmahera, (v) district of Morotai islands, (vi) district of East Halmahera, (vii) district of Central Halmahera, (viii) district of South Halmahera, and (ix) district of Sula islands (Table 1). The 2010 census data indicates four among the districts have less than 100.000 population, they are Morotai Island, Tidore Islands, East Halmahera, and Central Halmahera.

ⁱThe author was involved in the survey for the Rapid In-Migration Assessment (RIMA) sponsored by the Wedabay Nickel Consortium. The Environmental Resource Management (ERM), Jakarta, standed for the leadfirm in cooperation with the Cross Cultural Consulting Services (CCCS), USA.

ⁱⁱⁱIn the Foreword of the WBN President Director, in the The Environmental Impact Statement Report, 2009.

Table 1. Area and Population by Districts and Cities in North Maluku Province, 2005 and 2010

District/City	Capital City	Area, km ²	Population estimate 2005	Percentage	Population Census 2010	Percentage
Morotai Island	Daruba	495,69	*		52.860	5,10
North Halmahera	Tobelo	4951,61	172.298	19,54	161.580	15,60
West Halmahera	Ternate	2612,24	91.640	10,40	100.150	9,67
Ternate City	Ternate	250,85	156.735	17,77	185.660	17,93
Tidore Islands	Tidore	9564,00	78.025	8,85	89.510	8,64
East Halmahera	Maba	6506,20	56.836	6,44	72.770	7,02
Central Halmahera	Weda	2276,83	32.071	3,64	42.740	4,13
South Halmahera	Labuha	8779,32	170.180	19,30	198.030	19,12
Sula Islands	Sanana	9632,92	124.182	14,08	132.070	12,75
Total Province	Sofifi	45.069,66	881,867	100,00	1.035.478	100,00

* The 2000 Census population for Morotai Island Regency is included in the figure for North Halmahera Regency

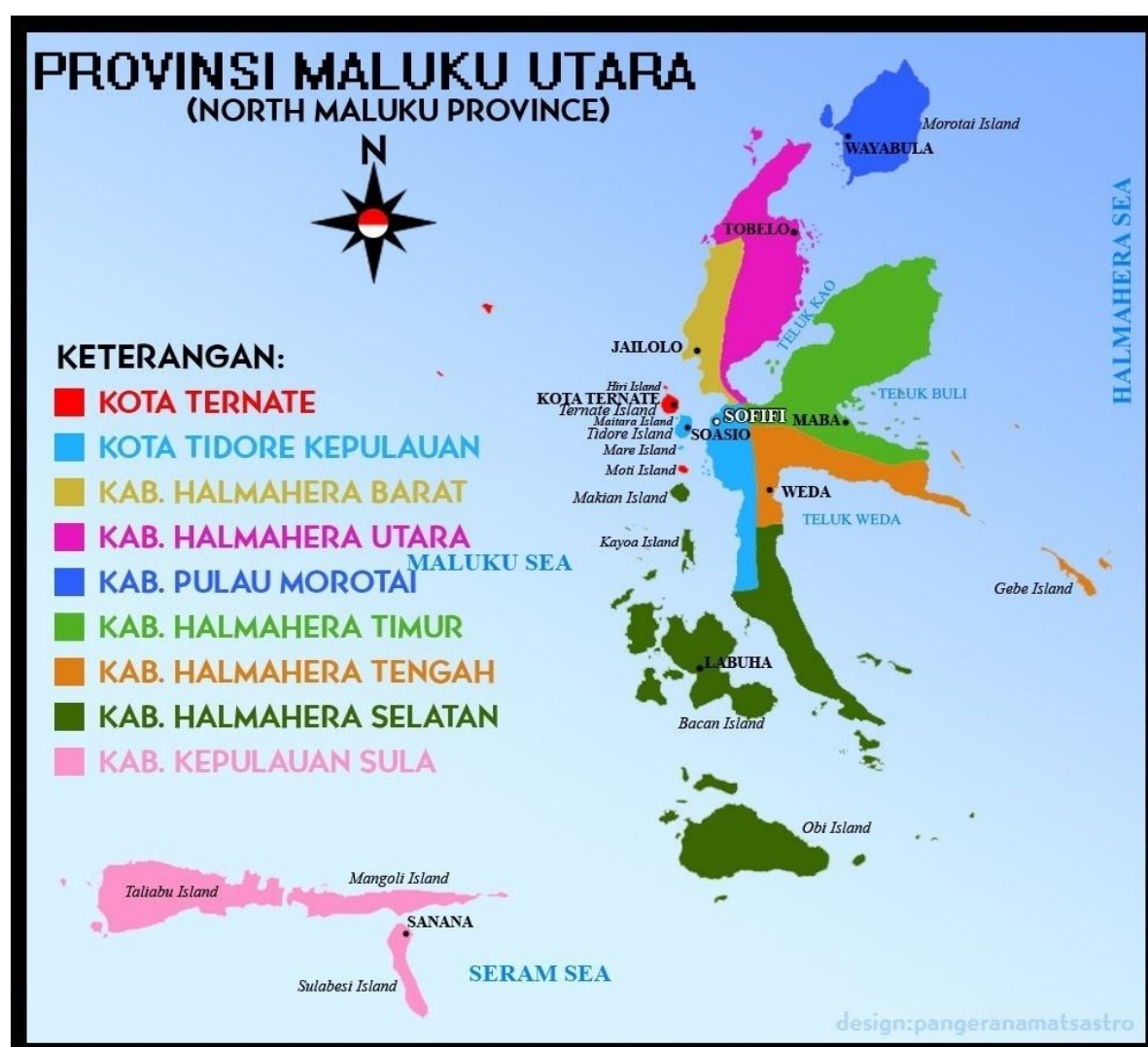


Figure 1. Map of North Maluku Province
Source: Indonesia Updates, 2012

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The high percentage of population in the North Maluku Province in the period of 2005 and 2010 were consecutively in Districts of South Halmahera, Ternate city, North Halmahera, Sula Islands, and the least percentage were in Districts of Central Halmahera and East Halmahera. The population increase in this province and its sub districts and cities is contributed by the natural increase and in-migration. The trends of in-migration is presented in the section that follows.

RECENT TRENDS OF THE IN-MIGRATION

Volume of in-migration

There are several main entrance gates and the path traversed by migrants to the

destination villages. They are the Ternate airport, the Bastiong harbor in Ternate, the Sofifi harbor in Halmahera islands, at the front of Ternate city, the Gita harbor, the Weda harbor, the Buli Airport, and the Maba Airport, and many other Sub district level harbors such as Lelilef, Sagea and Gemaf.

A lifetime migrant is a person, whose place of residence is different to his place of birth (Mantra, 2000, 250). Between year 2000 to 2010 the majority of migrants resided in Ternate, the former capital city of North Maluku Province; in 2000 the percentage of migrants to its total population was 46,71% and in 2010 it was 41,61% (Table 2). That means that the primacy of Ternate tend to decrease. However, the greatest number of migrants is still in Ternate City.

Table 2. The Lifetime Migrants by Districts / Cities in North Maluku Province, 2000 and 2010

No	District/ City	sex		Male + Female	Total Population	% - Migrant (7)=(5)/(6)
		Male	Female			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year 2000						
01	North Maluku	16068	13251	29319	374437	7,83
02	Central Halmahera	12290	10840	23130	143299	16,14
03	Ternate	35560	35479	71039	152097	46,71
	Prov. North Maluku	63918	59570	123488	669833	18,44
Year 2010						
01	West Halmahera	7485	7034	14519	100424	14,46
02	Central Halmahera	4271	3566	7837	42815	18,30
03	Kepulauan Sula	10157	9148	19305	132524	14,57
04	South Halmahera	6031	4810	10841	198911	5,45
05	North Halmahera	12931	11613	24544	161847	15,16
06	East Halmahera	12139	9990	22129	73109	30,27
07	Pulau Morotai	1910	1731	3641	52697	6,91
71	Kota Ternate	39617	37658	77275	185705	41,61
72	Kota Tidore	6165	6064	12229	90055	13,58
	Kepulauan Prov. North Maluku	100706	91614	192320	1038087	18,53
	Change2000- 2010	36788	32044	68832	368254	0,09

Source: BPS. 2011. Penduduk Provinsi Maluku Utara Berdasarkan Hasil Sensus Penduduk 2010

Table3. Ethnicity and Employment Segmentation Among the In-migrants in Central and East Halmahera

No	Ethnic Group	Employment Segmentation
1	Buginese (Makassar, South Sulawesi)	Trading: Basic food stuffs, shoes, and bags
2	Butonese (Buton, Southeast Sulawesi)	Trading: Kitchenwares, restaurants, and fishing
3	Gorontalo (North Sulawesi)	Trading: Clothes, vegetables
4	Javanese (Java)	Running Restaurants, small food kiosks, clothes, and agriculture
5	Sumatran (Sumatra)	Running Restaurants and small food kiosks
6	Ambonese (Ambon, Maluku)	Logging and others

Source: Field Study Data Analysis, 2011

The least percentage of in-migrants in 2010 was in South Halmahera and Pulau Morotai. Outside the cities, East Halmahera and Central Halmahera looked more attractive for in-migrants. The two regencies are one of the results of implementation of the re-districts (*pemekaran*) policy all over the country. The two districts, under direction of the Provincial and Central Government are currently pushing very hard for mining investment, especially nickel.

The Place of Origin

Based on a field survey in Central Halmahera and East Halmahera¹, in November 2011, it was found that 100 permanent migrants coming from 16 Provinces all over Indonesia. A complete census may change this information with more than 16 provinces. There are several ethnic origins among the in-migrants from the survey, which further analysis indicates segmentation of employment (Table 3). The Buginese, Butonese, and Gorontalo people dominate trading but with different area of specialization. The Buginese dominate business for foodstuff, shoes and bags. The Butonese specialize in kitchen wares, but some in restaurants and fishing activities. The Gorontalo people dominate clothes, but some engaged in trading vegetables. People from Sumatera have a lead in running restaurants and food kiosks for snacks.

Javanese engaged in running restaurants, selling clothes, and farming. The

transmigration program provided land for Javanese and people from Lombok. In exceptional cases, the local leaders wish to authorize specific portion of land to the in-migrants.

The Adjustment of In-Migrants

Aside from the pull and push factors of migration, there are two important accelerating factors; they are the socio-cultural factor and ethnic organizations. The most dominant factor of the cultural factor is kinship affiliation. Some of our respondents tend to come to places where some relatives have resided earlier, or the newest one tends to convince the relatives from the place of origin to join.

The ethnic organizations have important role in facilitating the new comers to adjust to the destination areas. In sub district of Weda in Central Hamahera, for example, we found three ethnic organizations; (i) Association of South Sulawesi Family (*Kerukunan Keluarga Sulawesi Selatan, KKSS*), Association of Buton Family (*Ikatan Keluarga Buton, IKB*), and Association of Javanese Family (*Paguyuban Keluarga Jawa, PKJ*). The associations also pooled some money to help new comers adapt with the situation or to help members in crises. These associations also have very practical measures, for instance, to facilitate strengthening the business of people from the similar ethnic groups. Another accelerating factors is the migration tradition of the Javanese, Buginese,

and Butonese (Southeast Sulawesi) who are traditionally migrate to the whole archipelago. Improvement of transportation infrastructure, the availability housing and spaces for temporary stay are also important.

THE ECONOMIC CONDITION OF THE REGION

Looking at the PDRB profile, the agricultural sector is still dominant. Thus, the performance of this sector represents the quality of living of the majority of the population. Based on the Central Halmahera and East Halmahera economic structure, agriculture contribute 43% of the PDRB (Table 4).

Agriculture

As has been pointed out, agriculture still dominates the regional economy. Food crops in Central Halmahera and East Halmahera are rice, corn, cassava, tubers, peanut, soybean and other minor crops (see Annex 1). Traditionally, the local people plant coconut, nutmeg, cocoa and coffee, and cloves (Annex 2).

Mining

The Statistik Daerah Propinsi Maluku Utara 2010 reported the mining production of the Province include Nickel (1.222.282 weight metric ton), gold (9.575 kgs), silver (12.990 kgs), and bauxite (86.509 mt). According to the report the production of nickel was by East Halmahera. There are several nickel companies operating in the province. One of them, and is still in the exploration is the Weda Bay Nickel (WBN). The WBN formerly established 120.500 ha of the core service area, but has been reduced to 54.874 haⁱⁱ covering part of Central Halmahera and East Halmahera.

The Weda Bay Nickel Project anticipates that 8,000 to 12,000 workers will be hired for future construction activities. The International Finance Corporation (IFC) analysis of projects in the mining sector reveals that for every formal job with the mine it can reasonably be expected that 3-10 additional jobs in the project area will be created. Thus, given WBN estimates, one can predict that an additional 24,000 to 120,000 jobs of the non-project in-migrants will be created as a result of this project – including opportunities for petty traders and small-scale service providers, particularly during its construction phase.

Table 4. Product Domestic Regional Bruto in Central Halmahera (2007) and East Halmahera (2008), Based on the Constant Price of year 2000

No	Sectors	Central Halmahera		East Halmahera	
		PDRB, 2007	%	PDRB, 2008	%
1	Agriculture	86400,10	43,90	94702,36	43,13
2	Mining & quarrying	33406,31	16,97	51504,61	23,46
3	Manufacturing (industry)	14733,67	7,49	10029,13	4,57
4	Electricity& water supply	305,04	0,15	383,94	0,51
5	Construction	4851,08	2,46	5105,38	2,32
6	Trade, Hotels & restaurants	32956,89	16,74	34954,05	15,92
7	Transportation & communication	6913,59	3,51	8493,3	3,87
8	Leasing (rent)&company services	1850,54	0,94	3490,61	1,59
9	Services	15492,12	7,83	10899,94	4,63
	Total	196819,34	100,00	219563,33	100,00
	PDRB without mining	165311,11		168058,71	

Source: ^a Central Halmahera in Figures, 2008; ^b East Halmahera in Figures, 2009

Table 5 The In-Migration Impacts, Mitigation and Potential Stakeholders

No	In-migration Impacts	Mitigation	Potential Stakeholders
A. Economic Aspect			
1	Increased demand for space to live (housing)	Provision of new houses	Local people, migrants, and housing companies
2	Increased demand for Non-farm livelihood (employment)	Provision of training where possible	Department of Labor and Transmigration
3	Increased demand for Farm livelihood (employment)	Protection of local people through customary law	Local leaders
B. Health Aspect			
4	Increased incidence rate of contagious diseases	Monitoring incidence rate of diseases	Health Services
5	Increased demand for clean water	Increasing the lines and supply of water	Regional State Enterprises for Water Supply
C. Ethnic Relations			
6	Change in Ethnic Composition	Manage potential conflict between ethnic groups; increase inter-group interaction	Kesbang linmas (Community Protection), and Community leaders
7	Jealous of Indigenous populations	Potential ethnic conflict	Ditto no.6
8	Loss of security and safety	Maintain the current security and safety performance; through identification of the causes and why the local people constantly comply with it	Police Office, Local leaders
D. Natural Resources			
9	Loss of amenities (keindahan)	Continue the Friday cleaning day	Community leaders and community participation, including the in-migrants
10	Loss of biodiversity in terrestrial area	Protect natural resources in the terrestrial area through identification, list, and socialize it to the community widely	Natural Resource Agency and concerned NGOs
11	Loss of biodiversity in inland water	Protect natural resources in the inland water through identification, list, and socialize it to the community widely	Natural Resource Agency and concerned NGOs
12	Loss of biodiversity in coastal and sea	Protect natural resources in the coastal and sea through identification, list, and socialize it to the community widely	Natural Resource Agency and concerned NGOs
13	Loss and conversion of forest land	Protect forest land and its richness from conversion. identify, list, and socialize it to the community widely	Natural Resource Agency and concerned NGOs

Source: Field Study Data Analysis, 2011

The in-flux migration rapid assessment (RIMA) consultant estimated a recruitment of 10.000 workers to engage directly in WBN project. The number of additional jobs outside WBN will be about 7×10.000 jobs =70.000 jobs. The point is that each of the mining activity needs direct labors to engage with the project and a large number of labors in the indirect jobs as its impact. How many people the management will recruit locally from the service area and how many people from outside, depends very much on the agreement achieved by the company and the representatives of the local people and local authorities.

My expertise judgment claim that most of the local people tend to be late in responding to the situation and left behind. Only very innovative people can compete with the in-migrants. It is the local authorities, together with the native community leaders should collaborate to place more numbers of local people in such competitive opportunities. If there is no collective action to anticipate the situation, the conflict between the local people and the in-migrants, will never be avoided.

Logging

In several documents the forest area was not recorded. The Government tend to

divide the province, districts and cities into land (terrestrial) and sea. An informant said that logging business was over. It is very hard now to get the ideal trees with diameter of 0,5 meter or over for logging. Traveling this island, sometime one may find special plots of land cleared for planting cash crops, like cloves and nutmeg.

What sort of impacts one may expect to arise in the situation where incentives for investment favorable in one side with an increase of in-flux migration as the consequence? This matter will become the focus of analysis in the following section.

SELECTED IMPACTS DUE TO IN-MIGRATION AND MITIGATION

The analysis of in-migration to an area of destination use to follow Lee's (1970) general model. Lee established the model which emphasize four factors which he suggests to work on the process of migration. They are: (1) individual factors, (2) the factors in the area of origin, (3) the factors in the area of destination, and (4) the intervening obstacles between the area of destination and the area of origin. Lee's model does not critically analyze the impacts of in-migration to the destination area, and leaves it for other experts to examine, including the economic approach of migration by Todaro (1979), for example.

This section is aimed to analyze the impacts of in-migration in relation to the likely increase in investment in the province of North Maluku, with a group of small islands. The impacts would be focusing on the natural resources, social interaction between the in-migrants and the indigenous people, economic and health issues (Table 5). The table also suggests some tentative mitigations or counter-measures and indicates the potential stakeholders who will be expectedly responsible for the relevant impacts.

Economic Aspects

The first issue is an increase in space for living. In areas where there are no housing companies present, it is the local people who kindly rent-out their premises to the in-migrants. This is different with the situation of the capital city of the districts where some people or even housing companies have anticipated through constructing houses for rent.

The second issue is the demand for non-farm employment. It is unlike the professionals whose job's was pre-arranged before moving. The unskilled people will face it difficult to have access to employment. A long term waiting unemployed will make people become frustrated.

In-migrants with farming background will push an increase in access to land. The local leaders in Halmahera are responsible for access

arrangement to land, to avoid possible friction with the interests of the indigenous people.

Health Aspects

A health issue is a human issue. Thus, it may be local, national, or international concern. A contagious disease, for example, will harm each of the local people and the expatriates as well. Another health-related problem arises if there is not enough clean water for all people in the destination sites.

Ethnic Relations

Potential areas in North Maluku Province will attract people from different ethnic groups from all over Indonesia, plus the ex-patriates from all over the world. The assembling of many people with different ethnic groups and different nations would give rise to a fragile social atmosphere if a high inequality occurs. The in-flux migration, sooner or later, would make the ethnic disparity, in terms of numbers or economically. A long term socio-economic disparity is highly possible to result in open conflicts.

Natural Resources

An increase in population density in North Maluku Province will also boost the volume of garbage. Inappropriate management of garbage will reduce the beauty of the open spaces like parks, play grounds, also markets, and the beaches. All have further impacts to health.

Generally, assemble of a multitude of people, in places like North Maluku would raise certain international concern. Extensive mining will terminate the richness of natural resources. If the mining service areas cover or close to the protected zones for plants and animals, due to their scarcity, the international community as a whole will lost as a result. Mining and processing plant, such as the nickel and any other case, will harm the body of water, be inland and the coastal and the sea. Various kind of fishes and the coral reefs collapse, which finally harmful for the local fishermen and fish farmers, and indirectly to the national interests. An increase in population

also leads to escalating conversion of the forest land for farming, housing, and other purposes.

CLOSING NOTE

This paper demonstrates the linkage between development and the in-flux migration. The interaction between these two factors probably generates some disadvantage outcomes to the sustainability of natural resources and to the welfare of people. Only a better, anticipated measure can avoid the likely disaster for both.

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Annex 1. Harvested Area, Production, and Production Per capita in Central and East Halmahera, 2010

No	Food crops	Central Halmahera ^a			East Halmahera ^b		
		Harvested Area (ha)	Production (ton)	Production /capita, kg	Harvested Area (ha)	Production (ton)	Production / capita, kg
1	Rice	2200,0	4284	100,06	3477,0	12051,30	165,00
2	Corn	530,0	1709	40,00	222,0	109,67	1,50
3	Cassava	236,0	3365	78,60	136,0	77,90	1,06
4	Sweet potatoes Tubers	-	-	-	121,0	72,65	1,00
		200,4	1426	33,30	-	-	-
5	Peanut	53,0	48	1,12	78,0	50,33	0,69
6	Soybean	99,0	86	2,00	26,5	12,25	0,17
	Population	42815			73109		

Source:^a Central Halmahera in Figures, 2010; ^b East Halmahera in Figures, 2010

Annex 2. Cultivated Area of Cash Crops, Production, and Production per capita per year, in Central and East Halmahera

No	Cash crops	Central Halmahera			East Halmahera		
		Area (ha)	Production (ton)	Production /capita, kg	Harvested Area (ha)	Production (ton)	Production / capita, kg
1	Coconut	9812	8743	204,20	8422	7193	98,40
2	Cloves	1405	157	3,70	376,15	459,7	6,30
3	Nutmeg	9798	2162	50,50	669,5	11,6	0,15
4	Cocoa	2710	415	97,00	135,50	95,2	1,30
5	Coffee	52	3,6	0,08	60,50	58,8	0,80
6	Cashew Nut	160	1,8	0,04	-	-	-
	Population	42815			73109		

Source:^a Central Halmahera in Figures, 2010; ^b East Halmahera in Figures, 2010

ⁱ The author was involved in the survey for the Rapid In-Migration Assessment (RIMA) sponsored by the Wedabay Nickel Consortium. The Environmental Resource Management (ERM), Jakarta, standed for the leadfirm in cooperation with the Cross Cultural Consulting Services (CCCS), USA.

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