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# **The Emergence of Early Warning Systems as a Mechanism to Promote Human Security in West Africa**

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## **Abstract**

The emerging threats to the security needs of people and states in the last two decade is evolving and taking a strategic shift in focus from state interest to fundamental concerns for human wellbeing. This required a wider array of outlook and assessment in order to respond, mitigate or prevent them from reaching crises point. In the light of these changing security dynamics, Early warning systems have been identified, established and institutionalized within national and intergovernmental structures, amongst NGO communities as well as civil societies and even in the academic community, as a mechanism that serves as an operational support structures to identify broader human security risks, assess their potential impact on people's lives and establish the platform upon which response or preventive actions may be undertaken.

In West Africa, the Economic Community of West African States (ECOWAS Commission), has established the most comprehensive institutional early warning system in Africa to identify, assess and respond to various human security concerns within the various countries in the sub region. Civil societies as well as government's institutions within the sub-region have made tangible efforts in establishing and operationalizing early warning systems to address issues of peace and security.

This paper attempts to build a convergence between early warning and human security based on the institutional and operational development of the process in West Africa. The paper will bring out the conceptual framework, operational development across the sub region, coordination and partnership with other institutions as well as its impact, prospects and challenges in the quest to promote human security as well as the prevention of conflicts in West Africa.

## **Keywords:**

Early Warning, Human Security, West Africa, ECOWAS, Conflict

## **1. Introduction**

The sub region of West Africa is widely considered to be one of the worst affected regions in Africa from the consequences of the end of the cold war with specific reference to peace stability governance and development placing it "amongst the world's most unstable regions"<sup>2</sup>. Within the last one and a half decades Liberia, Sierra Leone, Guinea, Cote d'Ivoire, Guinea Bissau, Senegal and

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<sup>2</sup> Adebajo, Rashid, ed. 2004, 1

Mali and even Nigeria have been “embroiled in an interconnected web of conflict”<sup>3</sup> that completely destabilized the entire region, creating more weak states that have the potential to collapse or with visible characteristics of degenerating into crisis point<sup>4</sup>.

Some of the core issues that have led to instability within the sub region includes the “effect of globalization, the nature of domestic politics which is inclusive of the neo-patrimonial governance” method and relationship between governments and the governed as well as a wider scale of inequality and discrimination both horizontal and vertical<sup>5</sup> in the economic and social development of people and groups from different backgrounds, sections or regional affiliation etc. across the larger society<sup>6</sup>.

Considering the protracted and spill over effect of crises in the sub region, ECOWAS which is the inter-government body, adopted on 10 December 1999 the Protocol on Conflict Prevention, Management Resolution, Peace Keeping and Security. The Protocol presents a new policy framework for action in conflict management and prevention, including the linkage of economic and social development to security, the strengthening of democratic forms of government and the promotion and enhancement of human security<sup>7</sup>. This protocol, in Article 23 Chapter four, stipulates the creation of an early warning mechanism through the establishment of an observation and monitoring centre for collection, analysis and reporting of information in order to manage and prevent conflicts and other forms of instabilities<sup>8</sup>.

The protocol led to the institutionalization and popularization of early warning with the overarching goal of promoting stability and human security. West African governments, civil societies, security structure/organizations, NGOs and even academics have realized the usefulness of conflict risk assessment and early warning processes in dealing with potential threats and challenges to the peace and security needs of their communities. This assertion forms the broader unit of analysis that this paper aims to bring out.

## **2. Overview of Conflict and Security threats and Challenges in West Africa**

Taking a brief retrospect down memory lane, the region has been made home to many different types of conflicts and civil upheavals with region wide implications. This includes identity and

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<sup>3</sup> Ibid

<sup>4</sup> Rotberg, 2003, 14

<sup>5</sup> Stewart(Ed.), 2008

<sup>6</sup> Francis, 2006, 143

<sup>7</sup> Lewis, Shinoda, 2012, 4

<sup>8</sup> ECOWAS Protocol, 1999

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intergroup crises and struggles, revolutionary and factional wars, Secessionist conflict as well as resourced based wars. As Francis (2001) maintained, the root causes of conflict in West Africa has focused on the political economy within states suggesting that one or all elements are generally the sources of wars and instability i.e., identity (ethnic, religion, nationalism), resources (economic agendas) and patrimonial politics<sup>9</sup>. This analysis though empirically true when considering the causes of conflict in places like Sierra Leone, Liberia Guinea Bissau and Cote d'Ivoire, constitutes a partial analysis of the problem of instability and insecurity in West Africa.

In some instances natural resources have served as a motivation that fuel violence and prolonged West African conflict which at some point built into a region wide insecurity complex. From existing situations, these issues have sustained instability through the activities of peace spoilers, an operationally viable shadow economy, armed criminality and transnational criminal activities<sup>10</sup>.

These situations of civil crises and political instability in west Africa have led to large scale refugee crises, breakdown on the social fabric of societies, affecting growth and economic development, collapse of state institutions and destruction of infrastructures, proliferations of small arms and light weapons, spread of diseases such as HIV/AIDS, malaria etc., human rights violations, discriminations with cost and consequences to economic developments. This situation stimulates state collapse or failure leading to growing regional fragility as many states lack viable political and economic structures for growth and transformation and the possibility of building a prosperous West Africa<sup>11</sup>.

Furthermore, the political dynamics and state of insecurity within many states in West Africa has seen the military institutions taking over power creating more complex problem for political transformation and democratization.

These myriad of intrastate conflicts within West African countries have generated from the struggle and deep desire of people and groups wanting to promote, protect sustain and uphold both their individual and collective identity, security and development. More than two-thirds of the 15 countries within the region have been consistently ranked within the least or low human development index over the last decade or longer in the United Nations Human Development Report<sup>12</sup>.

Another point worthy of note is the issues of recurring environmental and natural disasters

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<sup>9</sup> Francis, 2001, 11

<sup>10</sup> Francis, 2006, 143

<sup>11</sup> Lewis, Shinoda, 2012, 3

<sup>12</sup> UN, HDR 2013

within countries in the region. “West Africa has a variable climate that enhances the region’s vulnerability to floods and droughts. Extreme conditions with warming between 0.2c and 0.5c degree Celsius per decade is expected to increase water loss due to rising temperature and about 10% less rainfall in the interior regions”<sup>13</sup>. Currently, countries within “the Sahel areas are experiencing noticeable declines in rainfall patterns with recorded instances of drought in countries such as Burkina Faso, Mali and Niger”<sup>14</sup>. Equally so heavy flooding has also been recorded in some countries leading to displacement and breakdown in development and social livelihood of people and groups.

An emerging element within the human insecurity dynamics in the sub region is the growing network of terrorism that is expanding its reach from the Sahel states to the west coast within the region. Jihadist movements such as the Salafist Group for Preaching Combat (GSPC), the Al-Qaeda in the Islamic Maghreb (AQIM), and Boko Haram are all creating a state of fear, insecurity and violence within countries such as Mali, Mauritania, Niger, Burkina Faso and Nigeria. Thousands of people have lost their lives as a result of the activities of terrorist groups. The OECD 2012 Report on security risk in West Africa asserts that:

“the economic cost of this insecurity is enormous, in terms of the loss of human life, the destruction of infrastructure, the interruption of economic activities, the looting of natural resources, corruption, the flight of foreign investors and operators and migration and that these factors hinders economic development and threatens human security”<sup>15</sup>.

### **3. Evolution and Conceptualization of Early Warning**

Retrospections on the evolving process of early warning put forward a mixture of events in global history and international politics, as well as evolving dynamics and strategic shift in security needs and interests of states across the international community in dealing with the security challenges that go beyond the locus of the state.

Earlier approaches to the process emerged during the cold war in the field of military intelligence to enhance capacities to predict potential attacks. However, its latter operationalization concentrated on forecasting environmental hazards and natural disasters such as heavy flooding, earthquakes, hurricane, drought or famine, hurricanes and volcanic eruptions<sup>16</sup>. Also, by the late

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<sup>13</sup> Atta-Asamoah, KwesiAning, 2011, 77-95 in Jaye eds. 2011

<sup>14</sup> Ibid

<sup>15</sup> Wilkinson (OECD 2012), 12-29

<sup>16</sup> Simon and Neil, (2006), cited in Tiruneh 2010, KAIPTC, No 29, 5

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1970s and 1980s, early warning was used to predict economic conditions of stock market, humanitarian crises and refugee flow and in responding to droughts.

However, “conflict early warning only really emerged on the international policy agenda after the end of the cold war, when the conflict environment and the international conflict management framework evolved rapidly in response to the new geostrategic realities”<sup>17</sup>.

Concrete recognition and institutionalization of early warning system to promote human security and prevent violent conflict, became a reality in 1992 when the then United Nations Secretary General Boutros Boutros Ghali, in his landmark report, “An Agenda for Peace” established the link between emerging post-cold war security threats and human security concerns to early warning processes and preventive action. In the report, “he mentioned the valuable work of early warning system on environmental threats, the risk of nuclear accidents, natural disasters, mass movements of populations, the threat of famine and the spread of diseases”.

As security threats evolved in different regions of the world so did new initiatives, frameworks and institutional processes, overtime, that expanded on the needs and processes of early warning systems. The Carnegie Commission on Preventing Deadly Conflict (1997)<sup>18</sup>, OECD-DAC Guidelines on Conflict, Peace and Development Cooperation (2001<sup>19</sup>), the Brahimi Report on the Future of UN Peace Keeping (2000)<sup>20</sup>, and the UN Secretary General’s Report on Prevention of Armed Conflict (2001)<sup>21</sup> as well as other landmark international and regional initiatives over the years have made early warning processes an integral aspect in dealing with the new security challenges of the world.

With the spread of violent civil conflicts across different regions in Africa, couple with its gangrenous and rippling effect on civil population and governance structures, the Organization for African Unity (OAU), also in 1992, through the initiation of the Mechanism for Conflict prevention Management and Resolution, developed a unit for conflict early warning in Africa<sup>22</sup>.

However, it took about a decade (1992 to 2000) for institutional structures on early warning to gain serious momentum in the continent. A number of inter-governmental organizations (particularly in Africa) have established systems of risk assessment, and early warning processes with the purpose of bolstering their ability to anticipate crises and initiate preventive measures<sup>23</sup>. These regional

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<sup>17</sup> OECD, 2009, 13

<sup>18</sup> Commission on Preventing Deadly Conflict, 1997, 43-47

<sup>19</sup> DAC/OECD Guidelines, 2001, 31-34

<sup>20</sup> Brahimi Report, 2000, 13-14

<sup>21</sup> UN Report on Prevention of Armed Conflict, 2001, 33-34

<sup>22</sup> Cillier 2005, cited in OECD report 2009

<sup>23</sup> OECD, 2009, 52

structures include, the African Union (AU), Inter-governmental Authority on Development (IGAD) in east African and Economic Community of West African States (ECOWAS).

### **Early Warning - Methods and Process**

The broader conceptualization of early warning is understood to mean the collection of information to understand and pre-empt future developments in all field of endeavours and which borders on the wellbeing of people, states, institutions etc. However, from a more restrictive approach, early warning is defined as the systematic collection and analysis of information coming from areas of crises for the purposes of anticipating the escalation of violent conflict, development of strategic responses to these crises and the presentation of options to critical actors for the purposes of decision making.<sup>24</sup> Early warning systems link information sources, which often monitor specific indicators, with analysis that attaches a meaning to the indicators. Accordingly, they help to formulate response options, coherent political strategies and best and worst case scenarios to prevent or limit the destructive effects of violent conflicts.<sup>25</sup>

The Berghof Handbook on early warning stated that early warning from a conceptual approach is: “any initiative that focuses on systematic data collection, analysis and/or formulation of recommendations, including risk assessment and information sharing, regardless of topic, whether they are quantitative, qualitative or a blend of both”<sup>26</sup>. Therefore, the point being made here is that early warning can be sub divided into three categories: “(1) estimating the magnitude and timing of relative risks of emerging threats, (2) analyzing the nature of these threats and describing, plausible scenarios, and (3) communicating warning analyses to decision makers.”<sup>27</sup>

Similarly, Early Warning System involves regular and organised collection and analysis of information on violent conflict situations. They deliver a set of early warning products (based on quantitative and/or qualitative conflict analysis methods) that are linked to response instruments/mechanism<sup>28</sup>, and as the capabilities and value of these tools grew, they were integrated into the different early warning systems operated by governments, intergovernmental organizations and NGOs<sup>29</sup>.

Therefore, “effective early warning requires reliable information on a range of possible

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<sup>24</sup> Forum on Early Warning and Early Response (FEWER).

<sup>25</sup> Piza Lopez and Schmeidl, 2002.

<sup>26</sup> A.Austin, 2004, 3.

<sup>27</sup> Crisis State Research Centre, 2009.

<sup>28</sup> FEWER in Schmid, 1998, cited in OECD 2009, 22

<sup>29</sup> OECD, 2009, 39

common events - border crises, disintegrating regimes, human rights abuses, refuge flow and assessing where these are most likely to emerge. That, they attempt to identify threats to peace and security in social, political, economic, cultural, international, national and local conditions and events.”<sup>30</sup>

#### **4. The Utilization and Relevance of Early Warning to Human Security**

Human security in theory and practice continues to evolve with different contestations in its extraordinary expansiveness and comprehensive approach<sup>31</sup> for close to two decades now. This reality presents a unique picture of the global security dynamic in our world today. Human security gained international recognition in the early 1990s, when the international community realised that people, states and regions were increasingly overshadowed with security threats more from within rather than from without. This means states were no longer confronted by traditional security complexes and struggle for statehood or protection of her territorial integrity.

The 1994 U.N. Human Development Report is however, the first document/publication in which the conceptual notion of human security gained recognition and prominence within international discourse in order to “raise the critical question of rethinking the intellectual and policy content of security”<sup>32</sup>. Human security is not concern with weapons it is concern with human life and dignity”<sup>33</sup>. The report also states that:

“human security can be said to have two main aspects. It means, first, safety from such chronic threats as hunger, diseases and repression. And second, it means protection from sudden and hurtful disruption in the patterns of daily life – whether in homes, in jobs or in communities”<sup>34</sup>.

The fundamental pillar of early prevention as part of the processes of promoting and addressing issues of human security is the starting point of the connection between early warning and human security. In fact, the 1994 Human Development Report clearly establishes the utility and linkage of early warning by stating that early warning processes are integral to understanding and identifying potential threats to the security of people and that.:

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<sup>30</sup> Collins, 2006.

<sup>31</sup> Paris 2001, 88

<sup>32</sup> Ibid

<sup>33</sup> UNDP 1994, Chp. 2, para 22

<sup>34</sup> UNDP 1994, 22

“precise quantification of human security is impossible, but some useful indicators can provide an early warning of whether a country is facing problems of human insecurity and heading towards social disintegration and possible national breakdown”, and “such signals could help in agreeing on timely preventive action and avoiding conflict and war, rather than waiting until it is too late”<sup>35</sup>.

Understanding the dynamics of changes that take place within our communities and developing adequate response initiatives/actions can only be done when there is an early warning system in place that undertakes a comprehensive risk assessment process to identify impending threats, answer the questions who, when, where and how it may affect the lives of people and as such formed the basis upon which tangible preventive and response action or processes may be undertaken. Early warning processes present a groundswell of information resources that may shape policies, actions and response programmes that may directly or indirectly impact on the daily lives of people as well as the security of the state.

The Commission on Human Security Report of 2003 maintained that early warning mechanism is part of the “available tools” needed to undertake preventive actions in the midst of human crises and it should be mainstreamed in the work of global, regional and national governance structures and institutions<sup>36</sup>.

The linkages between early warning and human security is also reinforced in the 2001 Report of the International Commission on Intervention and State Sovereignty (ICISS) labelled the “Responsibility to Protect” which states (in paragraph 2.16 to 2.23 and 3.11) that “there is a need for more official resources to be devoted to early warning and analysis as preventive action is founded upon and proceeds from accurate prediction”<sup>37</sup> and identified a wider range of stakeholders that have been involved in this process.

Therefore, the utility and relevance is founded on the fact that early warning processes identified and developed response or preventive mechanisms to actual or perceived threats to the security and survival of people which in great effect promote human security

## **5. ECOWAS and the Struggle for Peace and Security**

The issue of instability and human security in West Africa have overtime been confronted by the Economic Community of West Africa States (ECOWAS) which is the regional

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<sup>35</sup> Ibid 38

<sup>36</sup> CHS, Human Security Now Report 2003, 131

<sup>37</sup> ICISS Report 2001, 21. Para 3.11

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inter-governmental body responsible for building regional and economic cooperation and promoting peace, security and political stability in the region. It was established in May 1975 with the signing of the Lagos Treaty. The “initial aim of the body was defined in Article 2 as the promotion of “cooperation and development in all fields of economic activities”<sup>38</sup>.

However, emerging conflict and political instability in several member states including coups d'états in Sierra Leone, Ghana, Nigeria and few others and the attempted invasion by Portuguese mercenaries in Guinea as well as Benin made ECOWAS realise that economic development cannot be achieved in the absence of peace and stability<sup>39</sup>.

However, ECOWAS gradual movement into security emerged in 1978 when the member states adopted the Non-aggression Treaty which called on its member states to refrain from the threat and use of force or aggression against each other (ECOWAS 1978). This was later followed in 1981 by the Protocol on Mutual Assistance on Defence. These two protocols were “designed primarily to reinforce state sovereignty by addressing external threats and aggression”<sup>40</sup>. Furthermore, the Protocol on Free Movement of Persons, and the Rights of Residence and Establishments was adopted in 1979 which “set out the vision and principles to underpin the creation of a borderless sub region with a common community citizenship and equal rights”<sup>41</sup>.

These Treaties focused on external threats and regional, state or regime security and stability and did not make room for the many intra state civil crises and the evolving dynamics on human security that dominated the sub region throughout the 1990s<sup>42</sup>. However, ECOWAS in 1991 agreed on the Declaration of Political Principles which committed member states to respect human rights, and to promote democracy and rule of law<sup>43</sup>. This declaration represents the first attempt by member states in West Africa to increase concern on critical aspects of governance systems that may impact on human security.

Traditionally, since gaining independence and ending liberation struggles, governments and regional groupings in Africa have developed security framework that work in the best interest of the state and not the people, and West African governments were no exception<sup>44</sup>.

Indeed, the West Africa sub region through its inter-governmental body (i.e., ECOWAS) struggled with and faced up to the new challenges in the security needs of the region. ECOWAS

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<sup>38</sup> ECOWAS, 1975, 2

<sup>39</sup> Kabia, 2011, 2

<sup>40</sup> Musah 2011, 152 in Jaye eds. 2011; Karugia, 2008, 97

<sup>41</sup> Ibid

<sup>42</sup> Kabia, 2011, 3; Chalachew, 2011, 52

<sup>43</sup> ECOWAS 1991

<sup>44</sup> Cillier 2004 cited in Ismail 2011, 174 in Jayeeds, 2012

adopted a Revised Treaty in 1993 which builds on policies for economic transformation that will put the region in a better footing to meet the challenges of globalization and address issues pertaining to security, conflict resolution and management. This Treaty tries to re-arrange regional initiatives for conflict management in the area of peace keeping, humanitarian intervention and dealing with the complex nature of peace making and processes for post conflict transformation and peace building<sup>45</sup>.

### **5.1 Human Security in the Lamel-light-From the 1993 Revised Treaty to the 1999 Protocol**

The extent of human security and its effects on regional economic development necessitated the involvement of ECOWAS in attempting to resolve<sup>46</sup> crises and instability within states in the region and the 1993 Revised Protocol to a gradual extent represented that vision.

This gradual shift also represent the new paradigm shift of security within international security discourse from traditional state centred security focus to human and people's needs that gained global recognition in the United Nations Human Development Report of 1994. This new human security agenda asserts human security needs to be borne out of `freedom from fear and freedom from want` and `stresses that people should be able to take care of themselves: all people should have the opportunity to meet their most essential needs and to earn their own living` and that human security is a critical ingredient of participatory development<sup>47</sup>.

The Revised treaty resonates with the emerging security thinking of the organization's members, `conscious of the over-riding need to encourage, foster and accelerate the economic and social development of states in order to improve the living standards of their people<sup>48</sup>. Francis (2006) maintained that `Article 4 of the revised treaty committed member states to social justice, respect for and protection of human rights, democratic governance and consolidation, popular participation and political and economic accountability and governance<sup>49</sup>. Whilst, `Article 58, provides for cooperation amongst member in establishing and strengthening appropriate mechanism for the timely prevention and resolution of intra-state and inter-state conflict<sup>50</sup>.

As West Africa continued to grapple with many human security concerns in the 1990s and the spill over of conflict from one country to another, the proliferation of Small Arms and Light Weapons(SALW) within the sub region was identified as `a veritable weapons of mass destruction as an estimated 8 million have been in circulation in the region and these weapons have fuelled

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<sup>45</sup> ECOWAS Revised Treaty 1993

<sup>46</sup> ECOWAS Risk Assessment Study 2012, 29

<sup>47</sup> UNDP 1994, 22

<sup>48</sup> ECOWAS Revised Treaty 1993

<sup>49</sup> Francis 2006, 150

<sup>50</sup> Ismail 2011, 175 in Jaye eds. 2011

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conflicts, facilitated the spread of armed non state actor and the upsurge of criminal and banditry post conflict activities”<sup>51</sup> all of which threaten human security and stability.

This led member states to sign the Declaration of A Moratorium on Importation, Exportation and Manufacture of Light weapons in West Africa in October 1998 with the principle objective to facilitate conflict sensitive development through preventive disarmament<sup>52</sup>. This was followed by a code of conduct for the implementation of the Moratorium on SALW in December 1998 as well as a broader commitment for the establishment of national commissions for the control of the proliferation and illicit circulation of SALW. Within this period (1998) a Plan of Action for the implementation of the Programme for Coordination and Assistance for Security and Development was established “to build peace in support of activities that will promote a secure and stable climate for socio-economic development”<sup>53</sup>.

In the midst of all these initiatives and programmes in responding to crises vulnerabilities and threat to human security, the region continued to falter as the existing mechanisms on peace and security “did not provide for a multilateral security framework or collective security” and were coupled with the fact that most member states were geo-politically divided with mutual suspicions and geostrategic competition<sup>54</sup>. These institutional and structural malaises in the region required a new focus supported by robust synergies to deal with the ongoing threats to human security of people and communities within the countries of the region.

In December 1990, the Protocol Relating to the Mechanism for Conflict Prevention, Management, Resolution, Peace Keeping and Security was adopted. It constitutes the most comprehensive normative framework for confronting the threat to peace and security in the region on a more permanent. Thereby boosting the conflict prevention capabilities of ECOWAS to pre-empt potential outbreak of violence, resolve conflict when they occur and to engage more effectively in post conflict reconstruction in places where peace has been restored<sup>55</sup>. It also addresses issues of cross border crime, drug trafficking, small arms proliferation and transnational criminal enterprises all of which represents the growing challenges to human security. The Mechanism establishes:

“inextricable links between the primordial *raison d’être* of the community, i.e., the economic and social development of the peoples and the security of the peoples and

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<sup>51</sup> Musah 2011, 155

<sup>52</sup> ECOWAS Risk Assessment Study 2012, 29

<sup>53</sup> ECOWAS- PCASED, 1998,

<sup>54</sup> rancis 2006, 150

<sup>55</sup> Ibid, 172, Musah, 155, Ismail, 175, Adebajo eds, 2004, ECOWAS Risk Study 2012

member states [article2 (a)], and task ECOWAS member states with the responsibility of managing and resolving internal and interstate conflict [article3 (a), as well as managing humanitarian, natural and environmental crises”<sup>56</sup>.

The Mechanism identifies the institutions and supporting organ responsible to implement its provision. This peace and security mechanism is the first comprehensive and multi-dimensional architecture for peace and security in the region and is the foundation on which the nexus between Early Warning and Human security was built from an institutional approach to a practical reality.

## **5.2 Emergence of Early Warning to Promote Human Security -Institutional Approach to Practical Reality**

By definition, early warning involves a process of communicating judgments about threats early enough for decision-makers to take action to deter whatever outcome is threatened; or failing that, to manage events in such a way that the worst consequences are mitigated.<sup>57</sup> It uses open source material and generally aim to serve human security not national or state interests and it is this characteristic that makes early warning systems appealing to intergovernmental organizations such as ECOWAS.

The new Regional Protocol on Peace and security of December 1999 under Chapter IV, Article 23 establishes a sub-regional peace and security observation system known as the “Early Warning system” in line with Article 58 of the Revised Treaty and the 1999 Protocol to monitor, process and report data relating to conflict and situations of human insecurity. This Observation and Monitoring Centre was later transformed into an Early Warning Directorate and “is responsible for observing and monitoring sub regional peace and security indicators including humanitarian, political and other human security issues within the framework of conflict prevention”<sup>58</sup>.

As stated in the United Nations Commission on Human Security Report of 2003, human security is “to protect the vital core of all human lives in ways that enhance human freedoms and fulfilment. Human security means protecting fundamental freedom that is the essence of life. It means protecting people from critical (severe) and pervasive (widespread) threats and situations”<sup>59</sup>. Therefore, the “application of human security, calls for an assessment of human insecurities that is people-centred, comprehensive, context specific and preventive”<sup>60</sup>.

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<sup>56</sup> ECOWAS Risk Study 2012, 30; Chalachew, 2011, 116

<sup>57</sup> McCarthy, 1997, pp.15-16.

<sup>58</sup> ECOWAS Early Warning website: [www.comm.ecowas.int](http://www.comm.ecowas.int)

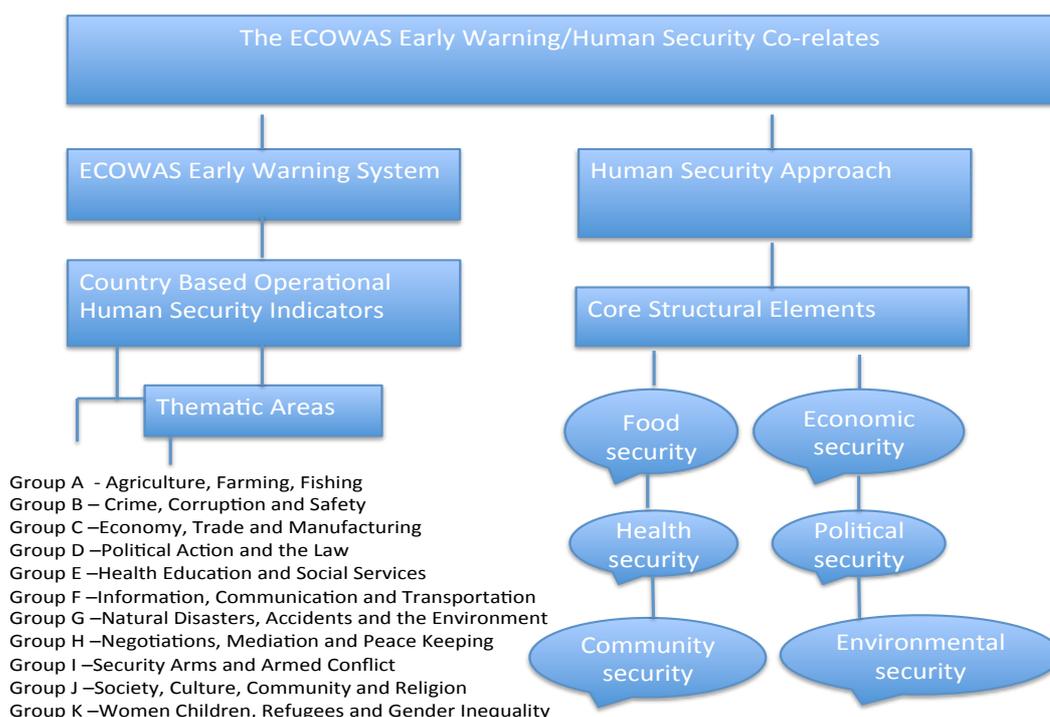
<sup>59</sup> CHS, Human Security Now Report 2003, 4

<sup>60</sup> [www.unocha.org/humansecurity/human-security-unit/human-security#a3](http://www.unocha.org/humansecurity/human-security-unit/human-security#a3)

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This broader vision clearly resonates with the operational reality of ECOWAS Early warning Mechanism. The structural and operational objective of the early warning process has a convergence of focus to the core elements of human security as shown in Figure 1 below.

**Figure 1- A Co-relates of ECOWAS Early Warning and Human Security**



Source: Design by Author (from ECOWARN system and 1994 UNHDR)

As seen in figure 1 above, the design of the ECOWAS Early Warning and Response Network (ECOWARN) is well grounded on a wider array of issues that bothers on the security, satisfaction and livelihood of people and communities. The institutionalization of the observation and monitoring system in 2001 was re-in forced by the development, designing and calibration of wider structured thematic human security indicators that resonates with the collective security needs and challenges of the people of West Africa. This operational development was undertaken with wider consultations between and amongst representatives of all the ECOWAS member states.

As the design shows, above, eleven (11) thematic areas, with a wider focus on human security issues formed the core of all the country based operational early warning system. In addition, each thematic section is expanded into specific human security indicators which are relevant to that thematic context and were later expanded into 94 human security indicators for each West African state.

However, in 2010 considering the fact that some of these indicators overlap or criss-crosses amongst themselves, the ECOWAS Early Warning department reduced it to sixty-six (66) in order to make the framework more compact. These thematic areas with their indicators were calibrated into an internet based operational early warning system with both Situation and Incidents reporting formats.

The country based reporting process is undertaken by both government and civil society field monitors within a member states who sends in daily and weekly report on situations of threats to security of people, groups, communities and the state as a whole. The process is undertaken with Standard Operating Procedures (SOPs) that provide guidelines by which the system operates in the fulfilment of the various functions and task<sup>61</sup>.

Further, Figure 1 is an attempt to show a clear co-relates of the core elements of human security and that of the early warning system in West Africa. The core human security element on the right hand side comes from the UNDP Human Development report 1994 new dimensions of human security that established that Food security, Health security, Community security, Environmental security, political security and Economic security should represent the essential elements of human security. The objectives of the 11 thematic areas and 66 indicators is to gain a critical insight into potential, emerging or existing threats to people, groups and communities within a member state.

### **5.3 Regional Scope of the Process**

Since its inception, the early warning process has a wider West Africa focus. As stated in Chapter IV, Article 24 sub section 1 in the ECOWAS Protocol of 1999, a clear division of member states was made into Zone with Zonal headquarters in the operationalization of the early warning system. The Zonal Bureaux “shall on a state by state and day-to-day basis collect data on indicators that impact on the peace and security of the zone and the sub region“<sup>62</sup>. The Table below presents the structures of these zones

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<sup>61</sup> ECOWAS Manual 2008, 9

<sup>62</sup> ECOWAS Protocol 1999

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Zones	Countries	Zonal Capital
1	Cape Verde The Gambia Guinea Bissau Mauritania Senegal	Banjul
2	Burkina Faso Cote d'Ivoire  Mali Niger	Ouagadougou
3	Ghana Guinea Liberia Sierra Leone	Monrovia
4	Benin Nigeria Togo	Cotonou

Source: Adapted from ECOWAS Protocol 1999<sup>63</sup>

The structural dynamics of these zones reflects the deep desire of ECOWAS to deal with issues of human insecurities and other forms of instability across West Africa as it “feeds into the system information from their locations on a daily basis through contact with government authorities, local citizens, public media and other news agencies”<sup>64</sup>. The ECOWAS Conflict Prevention Framework stipulates that zonal Bureaux “shall adopt a participatory regional approach in data gathering by building and strengthening cooperation with member states and civil society, including but not limited to NGOs, traditional groups, diverse interest groups, women and youth” in dealing with various threats to the security of state and people<sup>65</sup>.

#### 5.4 Reporting Pattern in Connection to Human Security

The process of reporting within the early warning systems are established, measured and determined based on a context specific range of issues that bears relevance to overall threats to the security of people as well as communities. It can be within a given time in relation to people and events which are determined by the actions and inactions of individuals, communities and groups as well as state institutions and the governance systems as a whole within and amongst member states in West Africa.

The ECOWAS Early Warning system has internet field based reports and analytical based reports on threats to peace, conflicts, sources of instability and overall threats to human security that are based on both qualitative and quantitative analysis of facts and findings. A breakdown of these

<sup>63</sup> ECOWAS Protocol 1999,

<sup>64</sup> Lewis, Shinoda, 2012, 26

<sup>65</sup> ECOWAS Protocol 1999

types of reports is highlighted below:

- Daily Highlights
- Incidents and Security Situation Report
- Weekly Situation Report
- Quarterly Security Situation
- Yearly Security Situation
- Early warning Report
- Policy Briefs<sup>66</sup>

The Situation and Incidents Reports can be found online by logging into the ECOWARN website. As stated early the situation report is made up of 66 indicators divided into three categories which includes immediate catalyst, proximate causes and systemic causes of conflict and threats to human security and covers issues ranging from governance, the economy, the environment, media armed criminality, cultural practices, social activities, women's issues politics and other issues related to peace and security of the people and state. Whilst, incidents reports are submitted as and when an incident worthy of reporting occurred<sup>67</sup>.

In addition, there are three levels of reporting mechanisms: countries, zones and headquarters. At the country level, incidents and situation reports are submitted by West Africa Network for Peace building (WANEP) which is a leading civil society peace building organization with a regional focus that has a cooperation agreement with ECOWAS and State government field monitors. At the zonal level, the reports posted on the ECOWARN website are reviewed and analysed at each zone by ECOWAS zonal bureaux officers (ZBOs) and WANEP zonal coordinators (ZCs). At the headquarter level, analysts at the ECOWAS Early Warning Directorate and the Peace Monitoring centre (PMC) of WANEP which is the focal office for data collection by civil society actors, examine the country reports together with the zonal analyst and develop assessments, alerts and recommendations for actions and intervention on potential threats to the security of state and people <sup>68</sup>.

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<sup>66</sup> [www.comm.ecowas.int](http://www.comm.ecowas.int)

<sup>67</sup> Lewis, Shinoda, 2012, 22

<sup>68</sup> Tiruneh 2010, KAIPTC, No 29, 16

### **5.5 How does the Early Warning Process impact/promote Human Security**

The ECOWAS Protocol on Conflict Prevention, Management, Peace Keeping and Security of 1999 raised the profile and relevance of early warning and its operationalization within West Africa and heralded a new approach to security thinking and in dealing with human crises as well as other forms of socio-economic and political instability.

The institutionalization of the early warning system into a directorate create the necessary information and data analysis needed to influence the formulation of new policies firstly within ECOWAS and later at country level that addresses potential threats to the security of people within the countries of West Africa. This means that the collection of early warning information creates a groundswell of multiple strategic information that borders on human security.

This information shapes the process of drawing on regional security initiatives, in the area of drug trafficking, transnational criminal activities, arms proliferation, major governance deficits, humanitarian intervention, as well as regional socio-economic policies that will have a wider impact in securing and protecting the lives of the people of West Africa.

Since the inception of the early warning process, it has supported various levels of interventions in protecting lives and promoting peace and security within and between states in the sub region. For example, when early warning signal pick up the emergence of severe droughts in Niger and Mali, the ECOWAS community provided financial and other logistical support to the government and people of these two countries. When Sierra Leone, Senegal and Guinea faced severe flooding, similar support was provided to them to support the recovery process. Though, delays due to bureaucratic ranglings and coordination issues may affect the ability of ECOWAS to respond on time.

As stated earlier, new policies, initiatives and legal instruments have been put forward such as Convention on Small Arms and Light Weapons (2006), the Protocol on Democracy and Good Governance (2001), the ECOWAS Conflict Prevention Framework (2008) as well as specialized agencies on transnational criminal activities such as Inter-governmental Action Group against Money Laundering and terrorism. A single currency is being finalized amongst member state that will support easy coordination of trade and investment amongst member states and promote economic cooperation for development in the sub region.

These policy initiatives and structures now have the potential to be effective and responsive as a result of the fact that the early warning system measures the impact of these initiatives within the countries in the sub region which informs new approach on what can be done at regional level to support country based initiatives that impact on the overall security of its people. For example, the

ECOWAS small arms programme has seen the setting up of National Commission on Small Arms in Sierra Leone and Ghana with early warning assessment forming part of the operational elements of these structures. Some countries such as Sierra Leone have even enacted it into law.

## 6. Country Based Initiatives

Different early warning programmes have been undertaken with different approaches across countries of the sub-region in dealing with threats in various sectors such as, food and nutrition for poverty reduction, health epidemic, and environmental concerns such as severe flooding as well as civil conflicts with both local and national dimensions.

In *Nigeria*, the Federal Ministry of Environment through its department for Erosion, Flood and Coastal Zone management have established Flood Early Warning System with key components for data collection and transmission, flood forecasting, warning dissemination and communication and emergency response with contribution and coordination coming from diverse range of relevant institutions, agencies, communities and individuals<sup>69</sup>. Also, civil society groups have a coordinated National Early Warning system that is divided into six geo-political zones and conducting monitoring and assessment of potential security risks.

In *Ghana*, the Community Resilience through Early Warning initiative is an offshoot of the Ghanaian Plan of Action for Disaster Risk Reduction which has led to tangible result in both the national and community level. Through the implementation of hazard mapping, early warning and vulnerability assessment and reduction, the programme hopes to reduce economic and human losses and damages from priority disaster within various areas by 2015<sup>70</sup>. There is also Ghana-warning and Response Network that is coordinated by civil society and operationalized by WANEP- Ghana.

Whilst in *Liberia*, an Early Warning and Response Network (LERN) have been developed with support and collaboration coming from state government, civil society groups and the international community. Standardized indicators have been designed with methods of forecasting high risk and potential threats to people. “There have been a total of 2,335 reports published on the LERN platform between January 2010 to December 2012” and these reports serve as information power source for engagement between the government and non-state actors in dealing with potential security threats across the country<sup>71</sup>.

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<sup>69</sup>UNDP and Nigeria Gov. Report 2009, 2

<sup>70</sup><http://areaghana.wordpress.com/resources/>accessed 20 July 2013

<sup>71</sup> LERN Trend Analysis Report, 2013, 9

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In *Sierra Leone*, the Office of National security (ONS) has established a new security framework through the security sector reform programme that gives priority to security of the people. The ONS has community risk assessment unit and a Disaster Management structure with an operational early warning system that assesses security risk at all levels of governance. Also, the ONS collaborate with the Sierra Leone Environmental Protection Agency to deal with environmental and human security concerns, in communities that are affected by mining. In addition, the Ministry of Agriculture, forestry and Food Security has established early warning structure to forecast the coordination and management of food production for the benefit of the people<sup>72</sup>.

In *Senegal*, the National Early warning system was provided with fund in 2009 by the United States government to strengthen national and decentralized capacity to monitor the food security and nutrition status of the population through a comprehensive Food Security and Vulnerability Assessment that included a household survey, a market survey and a livelihood mapping survey. Organized and participated in joint crop assessments, as well as a floods impact assessment that should coordinate early warning activities between different technical services at different levels<sup>73</sup>.

Also, in *Benin* and Early Warning and Agro meteorological information system has been developed and composed of national early warning and agro meteorological interpretation committee (CNPA) and local level communal early warning and climate change adaption committee (CCPAs) that also have several institutions with focal points. This process is supported by a periodic assessment of needs and impact at the beneficiary level, which enhances local farmers' abilities to adapt to climate change<sup>74</sup>.

Similarly, in *Cote d'Ivoire*, early warning and rapid response system for epidemic and natural disasters has been developed with support from the world health organization to support the monitoring of diseases with epidemic potential, and strengthen the coordination of health sector interventions in Côte d'Ivoire improve the functionality of basic health institutions in priority areas for displaced, repatriated, relocated and host communities<sup>75</sup>

Almost all the countries in West Africa are in one way or the other using early warning system to deal with the changing trends and security need of the people. Other West African state such as, The Gambia, Mali and even Guinea has some operational components of early warning within the security and governance sector of the state.

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<sup>72</sup> Interview 2012

<sup>73</sup> <http://www.fao.org/emergencies/fao-in-action/projecthighlights/projectdetail/en/c/178979/#sthash.e6SEsqyI.dpuf>

<sup>74</sup> [www.idrc.ca/EN/.../Adaptation-Insights-Benin-Agro-meteorological.pdf](http://www.idrc.ca/EN/.../Adaptation-Insights-Benin-Agro-meteorological.pdf)

<sup>75</sup> [www.who.int/entity/hac/about/donorinfo/cap\\_cote\\_divoire\\_2012.pdf](http://www.who.int/entity/hac/about/donorinfo/cap_cote_divoire_2012.pdf)

## **7. Strengths and Opportunities in the Early Warning/Human Security Nexus**

As other regions gradually embrace the systemic and operational value of early warning structures to promote human security, so too did the leaders of West Africa recognized the same vision. Therefore, the strength of the early warning/ human security convergence in the region is tied to the fact that it increases the knowledge base and capacity of government and institutions to gather both qualitative and quantitative information. This helps to better inform situation of threats to the security of people as well as the state which create a balance in the formulation of policies or implementation of programmes or enactment of laws that will bring about change and transformation into the lives of people across communities.

The process of observation and monitoring as well as forecasting creates an enabling environment for governments and non-state actors to be pre-emptive and preventive in handling issues that may present a potential security risk to the state as well as her people. Proper monitoring and forecasting can reduce the risk, impact, cost and consequences of environmental, natural and man-made disasters such as drought, flooding, nuclear explosion and even localized violence all of which impact on human security. A good example is the Flood early warning system that has been introduced in Nigeria.

Similarly, the strength of the connection comes from the fact that early warning helps to recognise differences in the social and economic opportunities of people and inform policy makers on what, when and how changes and actions can be undertaken to realise positive transformation. The case of Senegal and Sierra Leone's early warning programmes for food security therefore makes complete sense.

Therefore, from practical reality, human security needs and initiatives can thrive and survived better when early warning system support and bolster these programmes. In fact, early warning makes people, states and institutions to understand and get a better and bigger picture of threats and changes that may alter and impact on human security.

Again, the opportunities come from the processes of collective engagements amongst all stakeholders, its measurable impact from monitoring to advocacy, cross sectorial networking and linkages that are created between states and non-state actors and the groundswell of information and communication that helps to create the multi-dimensional security shift to support human security needs in the distant future.

## 7.1 Challenge

The realization of human security in West Africa is indeed a process and building viable early warning structures that are responsive to the realities on the ground have been compounded by institutional, operational, policy and other structural challenges that sometimes put into question or even create a disconnect between the process of early warning and its impact on human security.

Starting with the ECOWAS Early Warning system, there are some constraints that are worthy of note. The regional programme continues to contend with issues such as insufficient communication flow as a result of the unavailability of local monitors at community level, problem of building linkages between state government and civil society and local actors in putting collective efforts in bridging structural and interest based gaps and go beyond the actions of early warning to addressing the needs of people. The regional mechanism continues to face a hard struggle between recognizing the local needs of civil society and dealing with the larger problems of the state.

The early warning process has faced other existing challenges such as building consistent process of feedback to early warning issues which over time discredits the objective of the process. The feedback is normally expected to come in the form of responses and that should be immediate with realistic political and policy responses. Olawale (2011) mentioned that the “limitation to human security promotion in the sub-region is the often slow responses to, or indecision over or continued politicization of clear human security issues”<sup>76</sup>.

Connected to this is enhancing security systems reform, operationalizing the role of ECOWAS in stabilization and peacekeeping efforts, coordinating military assistance on a regional level as well as addressing the problem of proliferation of small arms and light weapons<sup>77</sup>. Also the level of engagement between ECOWAS and member states and their political leaders on the implementation of new policies and programmes that will be responsive to the new dynamics of the political, economic and social needs of their people and which also stand in line with new normative security framework of the region are yet to be realized.

Other issues include frequency and reliability of reports on potential threats, technological challenges in the internet reporting process and coordination between zones and zonal bureaux and local actors in dealing with security threats<sup>78</sup>.

In the midst of all these developments, the region is still overshadowed by many challenges to human security. In the 2012 OECD West African Studies on the security risk and development

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<sup>76</sup> Ishmail, 2011, 180

<sup>77</sup> Ibid

<sup>78</sup> Lewis and Shinoda, 2012, 30

challenges in the sub region, Denece and Rodier maintained that these challenges include persistence of internal conflicts as a result of state failure and lack of government capacity building; jihadist terrorism as a result of the rise of radical Islam through Al-Qaeda in the Islamic Maghreb, the spread of transnational criminal enterprises which include trafficking of narcotics and SALW and illegal exploitation of natural resource; widespread corruption, growing economic inequalities and disparities that affects social livelihood and political stability; as well as environmental concerns such as drought and famine, deforestation and flooding that sometimes exacerbate violent confrontations over natural resources, land, water<sup>79</sup> etc.

## **8. Concluding Remarks**

The structure and operational process of early warning and early warning systems is in no small way gaining usefulness in understanding and developing resources that promote human security. Considering the multiple security risk and challenges that West African countries need to overcome, early warning systems have the potential to positively make an impact on these security challenges.

Therefore, the paper has attempted to examine the evolution of early warning in West Africa, by bringing out the policies and institutional initiatives across the sub region that have formed the core pillars in promoting, responding and preventing threats to human security. It presented the operational convergence between early warning systems and human security and its impact in addressing the security needs of people and communities within West Africa. It assesses the leading role ECOWAS has played in the formulation of regional policies and initiatives that have informed the operationalization, coordination and institutionalization of early warning system and how to bolster actions to address human security concerns collectively as a region and within individual states through country based initiatives. It explains the efforts of civil society in the process as well as the strength and opportunities and challenges to the process.

In the recent Report of the U.N. Secretary General on the activities of the United Nations office for West Africa, he highlighted security trends that include terrorism, drug trafficking and organized crimes which threaten the safety and security of the people of West Africa<sup>80</sup>. And, early warning systems, if well situated and operationalized within institutions and state structures, can help to identify, respond and mitigate potential threats to the security and well being of people, communities and groups across West Africa.

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<sup>79</sup> OECD 2012, 50

<sup>80</sup> <http://unowa.unmissions.org/Default.aspx?tabid=773> accessed 16-07-2013

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## **Human Insecurity Caused by the Lack of Governance: A Case Study of the Sidoarjo Mudflow Disaster in East Java**

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### **Abstract**

A large-scale mudflow triggered by a technical error of an oil and gas exploration erupted in the Sidoarjo District, Indonesia on May 29, 2006. The mudflow is estimated to continue for the next 30 years. It has hit already 12 villages and forced resettlement around 13,000 households (HHs).

This paper aims to investigate the lack of governance caused the critical living condition of the victims displaced by the mudflow. As the government did not make recordkeeping on the address and situations of the victims, their living conditions are not identified. Government, NGO and other third parties can monitor only 450, so to say, lucky HHs.

All victims (13,000 HHs) exiled from their home villages are losing their voting rights in the next General Election 2014. Anyone, however, cannot know the living condition and the situation of the human security (or the human rights) of the “missing victims” who are not traceable.

### **Keywords:**

Sidoarjo mudflow, disaster, resettlement, traceable, missing victims

## **1. Introduction**

There are many disaster caused by industrial development in the world. Particularly insufficient technology, lack of skills, manpower and cost express how induced serious accidents or disasters. International Federation of Red Cross and Red Crescent Societies reported the total number of industrial accidents during 2002-2011 is 523 of 6,925 total disasters' number (7.5%) (IFRCRCS, 2010 p.251-252).

Centre for Research on the Epidemiology of Disasters (CRED) standardizes an international classification of disasters: natural and technological disasters. Natural disaster divides into five groups (biological; geophysical; climatological; hydrological and meteorological disasters) and technological disaster divides into three groups (industrial accidents; transport accidents and miscellaneous accidents) (The World Bank, 2010 p.339).

Deepti Verma (2012) noted the meaning of industrial disasters as a massive sudden outburst of

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the explosion or remittance of any fatal gas due to accident, incompetence or merely negligence, followed by hundreds of deaths, thousands of injuries and uncountable damages, disrupting the lives of not only the one suffered but also generations yet to come. He also noted the top 10 worst industrial disasters, consists of oil spill, explosion, fireworks, chemical, nuclear accidents, gas and mine, including the “Chernobyl” nuclear plant disaster in Ukraine on April 26, 1986, after a trial on a nuclear reactor went out of control ensuing in a catastrophic nuclear meltdown<sup>3</sup>.

The World Bank (2012) also reported the latest and the largest accident happened at the Fukushima Daiichi Nuclear Power Station Japan after the Great East Japan Earthquake on March 11, 2011. This power station located close to the epicenter of the earthquake. Suddenly large tsunami waves which hit within an hour after the main earthquake caused all operating units to shut down automatically and destroyed all of the fail-safe devices. The disaster of the Fukushima Daiichi nuclear power station made about 160,000 people evacuated (60,000 were taken outside Fukushima prefecture). Many were unable to return to their homes for a long time because of unsafe levels of radioactive.

In Indonesia, the most typical one is Sidoarjo mudflow incident on 29<sup>th</sup> May 2006, an eruption of mud, steam, and water, triggered by exploration drilling. By this eruption, 12 villages were inundated and at least about 13,000 households of about 20,000 total households population were displaced in that area. The flow rates remain high, about 7,000-150,000 m<sup>3</sup> per day (Davies, 2007 p.1). Geology experts of Indonesian Oil Company (Pertamina) and Bandung Institute Technology (ITB) estimated this mudflow would continue for the next 23-35 years (BPLS, 2010 p.6). It is, however, regarded not as industrial disaster but natural disaster based on the Indonesian Supreme Court decision on the law case between NGO and Lapindo Brantas Inc. This paper, however, aims to examine the impact on the people caused by the decision that the judicial court and the government regarded it as a natural disaster.

In 2006, the total economic loss estimated was 1,407,936 million IDR (156.4 million USD). In agricultural sector, 229.7 hectare of paddy fields and 64 hectare of sugar cane areas were inundated (BPK-RI, 20017, p.19-21). The detail on the affected area and the population is shown by Table 1.

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<sup>3</sup> <http://topyaps.com/top-10-worst-industrial-disasters/>.

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**Table 1. Area and Population Affected by Sidoarjo Mudflow**

No	Sub district	Village	General Data			Mudflow Affected		
			Area (ha)	HHs	Popul	Area (ha)	HHs	Popul
1	Porong	Mindi	63.41	1,339	4,377	26.50*	0	0
2		Siring	74.97	925	3,078	47.00	606	2,047
3		Jatirejo	94.49	1,164	5,026	87.46	918	4,324
4		Glagaharum	165.60	1,375	6,646	10.02	408	1,649
5	Tanggulangin	Renokenongo	195.40	1,325	4,724	195.40	1,325	4,724
6		Kalitengah	119.00	2,980	9,254	3.00	23	150
7		Ketapang	134.45	1,281	4,878	25.00	200	453
8		Gempolsari	155.32	1,300	4,415	6.57	121	361
9	Jabon	Kedungbendo	156.60	5,784	21,993	156.60	5,784	21,993
10		Besuki	166.48	1,221	4,820	20.00*	0	0
11		Kedungcangkring	120.80	1,142	3,853	24.00*	0	0
12		Pejarakan	44.84	517	1,700	26.50*	0	0
			1,491.36	20,353	74,764	628.05	9,385	35,701

Source: Human Relationship Division of BPLS (2013).

Note: Communication through email with Human Relationship Division of BPLS on 11th of June 2013.

\* Means only paddy field not including housing area.

Lapindo as a license holder of oil and gas exploration was responsible to this disaster (Davies, 2009, p.6). Government of Republic Indonesia issued the Presidential Decree 14/ 2007 and obligated the Lapindo to compensate (acquisition) the people's damaged assets equivalent to or more than their market value (Presidential Decree 14/2007, article 15). About 13,000 households were partly compensated by Lapindo during 2006-2010. The government could monitor only about 2,600 households. The compensation and resettlement of the other about 11,000 households, however, were unmonitored.

Since the Lapindo could not afford to pay the compensation in 2008, the disbursement of the compensation for the about 13,000 households was delayed. On the other hand, continued mudflow affected another new about 7,000 households and the government amended the decree to allocate the budget for compensating those new victims. Moreover, due to the Lapindo's disclosing all the record of victims, it was difficult for the government to trace victims' situation. Any third parties could not make sure the victims' living condition after they were displaced.

In 2003, the Commission of Human Security (CHS) defined human security, in its final reports *Human Security Now*, as protecting "fundamental freedom – freedoms that are essence for life" (UN. 2009, p.6). Protecting means to protect people from critical (severe) and pervasive (widespread) threats and situations through process that build on people's strength and aspirations. "It means creating political, social, environmental, economic, and cultural systems that together give people the building blocks of survival, livelihood and dignity" (UN. 2009, p6). The Human Security has seven components of 1) Economic Security, 2) Food Security, 3) Health Security, 4)

Environmental Security, 5) Personal Security, 6) Community Security, and 7) Political Security.

Sidoarjo mudflow case linked to all seven components of Human Security. However, political issue, community security, and personal security are particularly critical in Sidoarjo. The victims were forced to be resettled and lost their houses, agriculture lands, community lands, public facilities (roads, market, mosque, and irrigation systems), relation with their relatives, jobs, etc. The village administration collapsed after disaster caused substantial reduction of public services for the victims, e.g., public works, health care, resident identification and registration, and even voting right. Because of the lack of governance, most of victims became untraceable several years after the resettlement, and it is hard for the government to identify where and how they live now. The personal and the community security are crucially unsecured in Sidoarjo case. This is strongly and largely affected by the lack of governance (at the level of both local and central governments) that deeply linked to political process. The Sidoarjo mudflow incident is a typical and representative case to understand the various impacts of losing of the human security namely personal security and community security caused by the collapse of social capital retained by traditional village community under the lack of governance.

The World Bank (2003) defined the village's activity as a social capital of a trust and solidarity; collective action and cooperation; social cohesion and inclusion; and empowerment and political action. Putnam (1993) also defined the social capital as a feature of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions. People of Java maintained village (*desa*) community which retained various communal assets and institutions, protected their daily life with humanity. These communal assets and institutions are social capital defined by World Bank and R. Putnam which enable a trust and solidarity, collective action and cooperation; social cohesion and inclusion; and empowerment and political action. The villages in Sidoarjo as typical Javanese villages retained various social capitals, but mostly collapsed or dismantled by forced resettlement.

This study will investigate the lack of governance in the implementation of various countermeasures of Sidoarjo incident and the dismantlement of social capital. This is aimed to reveal the dismantlement of social capital could cause the serious threat to the human security. Most previous studies regarding the Sidoarjo mudflow reported the process and causes of the mud eruption but study on the impacts of the incident is rare. Mc. Michael's study about its impacts on the environment, transportation and logistics network, and economic and business sectors is an exceptional one (Mc. Michael, 2009, p.73-83). This study mainly focuses the resettlement process and its problems caused by the collapse of traditional community and the lack of governance. Our

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objectives are as follows:

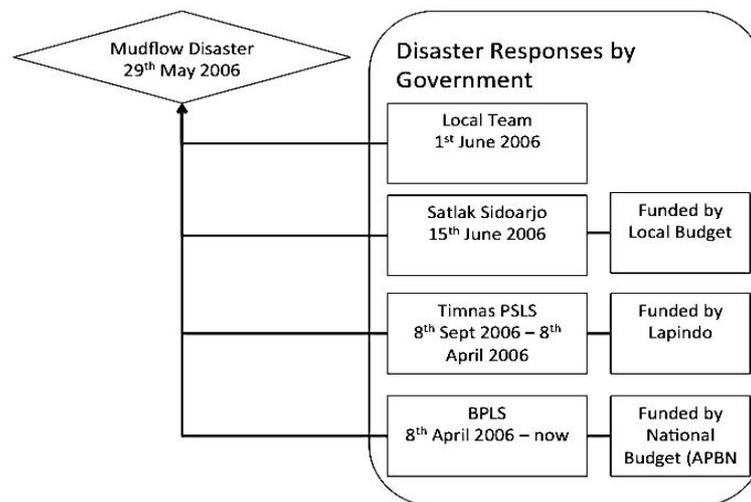
- a ) To reveal the governance after the mudflow and the sharing responsibility among the central government, the local government, and the company;
- b ) To reveal the land acquisition process and the resettlement; and
- c ) To investigate the reduction of personal security and community security by observing present situation of the victims and the dismantlement of social capital.

## 2. Process of Countermeasures

### (1) Legal Setting

From the 29<sup>th</sup> May 2006 until the end of December 2006, the Sidoarjo mudflow covered the area of 3.6 sq. km with its thick up to 10 m, buried 4 villages and 25 large factories and displaced 11,000 people (Davies, 2007, p.1). The central and local government established several institutions so as to cope with those impacts and to discharge the government responsibility as depicted by the following flowchart:

**Figure 1. Governmental Organization to Solve the Sidoarjo Mudflow Problem**



Source: Author summarized based on the Presidential Decree 14/2007.

On 1<sup>st</sup> June 2006, the Sidoarjo local military's chief (*Komando Resort Militer*, or *Korem*) initiated to establish a "temporary" disaster response team comprising of police, volunteers, and also

village community leaders. It was however not efficiently conducted because this team was not official but voluntary one<sup>4</sup>.

Sidoarjo district government officially established a special team “Managing Unit of Mudflow Mitigation” called SATLAK led by the district governor. Its duties were to evacuate the victims promptly; to prepare the displacement camp; and to collect and distribute all related information through Media Center (Davies R, et.al, 2009, p.15-16). The victims, however, thought that SATLAK didn’t help them well. Hence, on 22<sup>nd</sup> August 2006, about 1,000 victims made demonstration to the district office and require the dissolution of SATLAK<sup>5</sup>.

On 30<sup>th</sup> August 2006, a meeting was held among President, province governor, district governor, and some Parliament members. The meeting discussed the mitigation of disaster and the establishment of the National Team “Timnas PSLs” which was started on 8<sup>th</sup> September 2006, aims to evacuate the victims surround mudflow area; to maintain the infrastructure surround mudflow area; to stop the mudflow; to arrange the compensation for area map payment; and to make Lapindo pay the team’s budget and dismiss after 8 months<sup>6</sup>.

The governments and Lapindo agreed to determine the value of compensation (house and land). Based on this agreement, President of Republic of Indonesia established a temporary executing agency called Sidoarjo Mudflow Management Board (BPLS).

The Presidential Decree took into account the fact that the mudflow explosion triggered by the miss-drilling of Banjar Panji 1 (BJP1) well which was drilled by PT. Medici Citra Nusa (MCN Inc.), a venture under the contract of Lapindo (BPK-RI, 2007, p.4-6).

The President Decree 14/ 2007 was only one regulation to handle the mudflow impacts and to establish the executing agency for the management of the disaster. It fixed the obligation of Lapindo (the company) to purchase the lands 628 ha of victims and to pay the compensation equivalent to or more than their market value.

Meanwhile, there were another 431 Ha of lands affected by the mudflow from 2007 to 2013. In line with the expanded impacts of mudflow, the Presidential Decree was amended five times.

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<sup>4</sup> Interview with a BPLS officer, 10<sup>th</sup> June 2011.

<sup>5</sup> <http://hotmudflow.wordpress.com/2006/08/22/wabup-sidoarjo-warga-tidak-berhak-bubarkan-satlak/>.

<sup>6</sup> Interview with a BPLS officer, 10<sup>th</sup> June 2011.

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**Table 2. Summary of Presidential Decree 14/2007 and Its Amendments**

No.	Decree 14/2007	Amend I 48/2008	Am. II 40/2009	Am. III 68/2011	Am. IV 37/2012	Am. V 33/2013
	Date of Issue	8-4-2007	17-7-2008	23-9-2009	27-9-2011	5-4-2012 8-5-2013
1.	Obligation by Institution:					
	Lapindo	Handle social problems and purchase victims' assets inside inundated area (22 <sup>nd</sup> March 2007's map)	Idem	Idem	Idem	Idem
	BPLS	Handle social problems outside 22 <sup>nd</sup> March 2007's map; and manage mudflow eruption	Idem	Purchase victims' assets outside 22 <sup>nd</sup> March 2007's map; and handle its social problems.	Idem	Idem
2.	Target of Compensation by Institution:					
	Lapindo	Inside inundated area of mud flow: Jatirejo, Kedungbendo, Siring, Ketapang, Kalitengah, Gempolsari, Pejarakan, Mindi, Glagaharum, Renokenongo villages	-	-	-	-
	BPLS	Outside inundated area of mud flowed	Besuki (B), Kedungcangkri ng (K) villages	Adding 9 neighborhood groups (RT) of B and K villages	Idem	Adding 65 neighborhood groups (RT) of B and K villages
3.	Funding and operation					
	Funding Responsibility for Compensation	Lapindo	BPLS	BPLS	BPLS	BPLS
	Stopping Mudflow and Removing Mud	Lapindo	Lapindo	BPLS	BPLS	BPLS

Source: Presidential Decree 14/2007 and its Amendments.

This unstoppable mudflow caused the various hardships of the victims. Hence, some NGOs initiated to sue the Lapindo and Indonesian Government. Indonesian courts dismissed all of those as follows:

- a ) On the 27<sup>th</sup> November 2007, the District Court of Central Jakarta concluded the lawsuit of Indonesian Legal Aid Foundation (YLBHI) that there is no evidence of the infringement against the regulations by the Lapindo and the governments<sup>7</sup>. The High Court of Jakarta reinforced the District Court decision on 13<sup>th</sup> June 2008 so that mudflow can be a natural disaster rather than a man-made disaster. Supreme Court also decided on 3<sup>rd</sup> April 2009 that mudflow is not an industrial disaster but a natural phenomenon.

<sup>7</sup> YLBHI *Banding Kasus Lapindo*, news.detik, 10<sup>th</sup> December 2007.

- b) On the 14<sup>th</sup> December 2007, Supreme Court refused the lawsuit of Indonesian Legal Aid Foundation (YLBHI) regarding to the Presidential Decree 14/2007<sup>8</sup>.
- c) On the 27<sup>th</sup> December 2007, The District Court of Jakarta Pusat refused the court claim of Indonesian Environmental Foundation (WALHI). This refuse was reinforced by The High Court of Jakarta on 27<sup>th</sup> October 2008 which regarded the mudflow as a natural phenomenon.
- d) On the 5<sup>th</sup> August 2009, East Java Police Office issued a letter on the investigation termination regarding to the civil lawsuit between WALHI and YLBHI against Lapindo and the Government of Indonesia. The District Court of Surabaya reinforced it (Kahpi, 2012, p.161).

Key point is that Indonesian judicial authorities regarded Sidoarjo mudflow as a natural phenomenon not a man-made disaster or industrial disaster. This made the difficulties of law enforcement to the Lapindo Company. The relationship between company and victims become only a business and social responsibility for compensation. Hence, it was not regarded as a legal-guilty to compensate the victims.

Since Lapindo has not legal obligation to compensate all mudflow's impacts, they stopped to fund the acquisition process and the mudflow reduction process, and lets the government to pay for those activities, authorized by the decree's amendments.

## (2) Disaster Mitigation Governance

President established the BPLS to mitigate the various impacts caused by the mudflow incident. In addition to set up necessary budget and qualified human resources, President established the steering committee of BPLS consisted of several institutions i.e. ministries and local government. It aims to supervise, advice, and evaluate the mitigation action. Each month, BPLS is obligated the monthly submission of progress report to the President and the steering committee. The steering committee itself obligated to report to the President monthly.

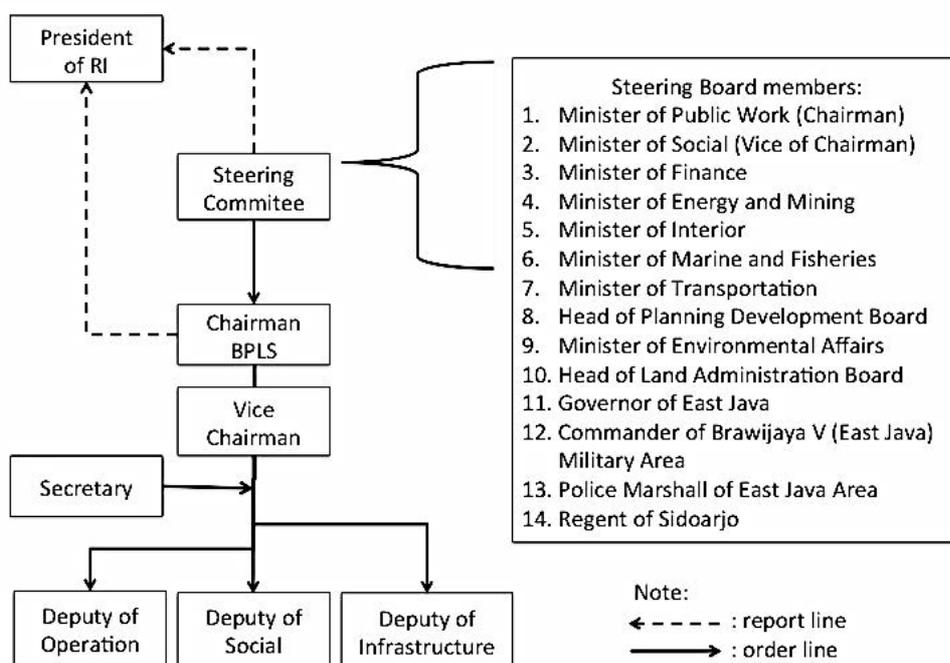
Steering committee comprising various governmental departments is responsible to the problems and supervises the chairman of BPLS. The chairman itself is responsible for the implementation of the disaster management under the supervision of the steering committee. The chairman needs to coordinate the various requests of the steering committee members. According to

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<sup>8</sup> Solihin, Tasliman 2010.

the article 1 and 6 of the Presidential decree 14/2007, there is no direct order from President, neither to the steering committee nor the chairman. The steering committee gives order and supervision to the chairman. The chairman itself is responsible to the steering committee. The structure of BPLS is as follow.

**Figure 2. BPLS's Structure**



Source: Author summarized based on the Presidential Decree 14/2007.

The total budget of BPLS from 2008 to 2013 was 948.9 million USD, which was comprised of the expenses for infrastructure and non-infrastructure. The disbursed budget was, however, only 388.3 million USD (about 40%) in 2008-2013, mainly caused by the delay of the road relocation and the compensation payment as follows.

**Table 3. Budget and Expenditure 2008-2013**

		(In million USD)											
No	Work Division	2008		2009		2010		2011		2012		2013	
		Budg	Real	Budg	Real	Budg	Real	Budg	Real	Budg	Real	Budg	Real
1	Secretary	1.8	1.6	1.9	1.6	1.9	1.9	2.5	2.1	3.0	2.6	3.3	-
2	Social	25.3	12.8	9.4	2.1	1.4	0.8	62.0	9.5	124.3	85.0	212.8	-
3	Infrastructure	94.1	41.9	97.4	67.9	116.9	62.4	62.6	40.9	27.2	22.0	16.7	-
	a. Road relocation	64.9	18.5	49.2	23.8	38.8	20.1	36.0	16.4	22.8	18.6	13.3	-
	b. Mud-handling	29.2	23.4	48.2	44.1	78.2	42.3	26.6	24.5	4.4	3.4	3.4	-
4	Operation	1.0	0.8	18.8	6.8	14.9	5.8	15.7	11.0	15.9	8.9	17.8	-
	Total	122.2	57.1	127.5	78.4	135.1	70.8	142.9	63.6	170.4	118.5	250.8	-

Source: BPLS financial data (2013)

Notes: Budg is budget; Real is realization.

BPLS invites and employs many professionals for each division, for examples, lecturers, researchers, and civil servants to discharge its mission (reconstruction or rehabilitation of infrastructures and socio-economic countermeasures). The civil servants in Table 4 mean lecturers and employees of central or local governments who had expertise regarding to the disaster management. The data on the man power is as follow.

**Table 4. Man Power of BPLS**

No.	Personnel type	Personnel Number	Percentage
1	Civil Servant Employee	17	6.8%
2	Non Civil Servant Employee	232	93.2%
	a. Retired civil servant	39	15.7%
	b. Fixed Employee	106	42.6%
3.	Contract Employee	87	34.9%
	Total	249	100.0%

Source: Human Relationship Division of BPLS (2013)<sup>9</sup>

Regarding to the assistance and advocacy for the victims, BPLS undertakes tasks such as coordinating the mitigation of social problems; arranging the social plan mitigation of social impacts; giving aids and social recovery; supervising the payment process of the compensation by Lapindo; and evaluating living condition and social environment community setting.

According to the BPLS's progress report, BPLS did not identify the victims or verify the records on the victims. It undertakes the supervision of compensation<sup>10</sup>. Only Lapindo has kept the records on the victims and can fully access to all victims. The records are not disclosed yet.

<sup>9</sup> Correspondence in 10<sup>th</sup> of July 2013.

<sup>10</sup> BPLS May status report, 2011.

Political aspect controversially affected the continuity and eligibility of BPLS<sup>11</sup>. The owner of Lapindo is one of “the strong persons” in Indonesia, proclaimed by some Medias as the next president candidate of 2014 election<sup>12</sup>. BPLS is a temporary institution established by the Presidential Decree. Accordingly, if the new President has large vested interests of the Lapindo, he could cancel the decree on BPLS or decrease its authority to execute the supervision of compensation. The role of BPLS could be constrained strongly by political situation and the monitoring of the victims cannot be improved.

### (3) Company’s Responsibility

Lapindo was obligated to compensate victims’ assets in the inside the mudflow area (628 ha area). The disbursement of the compensation was smooth at the beginning stage, but on May 2008 (after the global economic crisis in the mid of 2008) it began to delay. Vice President of Lapindo, Mr. Andi Darussalam Tabussala said that:

“Frankly, we cannot afford (to pay) the compensation of all victims’ assets.”<sup>13</sup>

After that statement, on 17<sup>th</sup> July 2008 the central government amended the Presidential decree. The 1<sup>st</sup> amendment obligated the central government to handle and to pay all the mudflow handling cost. Lapindo became free from the responsibility to construct embankment dams made of rock and sand to prevent the widespread mudflow. There was, however, no clear evidence whether the central government took into account to what extent about the Lapindo’s financial problem. The compensation paid during 2006-2013 (amendment I to V) is shown by Table 5.

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<sup>11</sup> Interview with BPLS officer, 10<sup>th</sup> June 2011.

<sup>12</sup> The expenses for the victims became financed by the government budget according to the Decree issued by President on April 2007. This indicated the special relation of President Yudhoyono and the Abu Rizal Bakrie (the owner of Lapindo). It is well know that Bakrie is the major contributor to the Golkar party and also contributed to the Yudhoyono Campaign in the 2009 election (Schiller, et. Al).

<sup>13</sup> This was stated in front of the representative victims, *Tempo Interaktif*, 12<sup>th</sup> February 2009.

**Table 5. Assets of Victims Purchased by Lapindo and BPLS (as of 31 December 2012)**

No.	Funding	Legal base	Document			Payment (Million USD)			Area (ha)
			Target	Realize	%	Target	Realize	%	
1.	Lapindo	Presidential Decree 14/2007*	13,237	13,172	99.5	425.4	330.9	77.8	628
2.	BPLS	Amendment I-V**	6,984	6,081	87.1	168.5	127.6	75.8	430
Total			20,221	19,253	95.2	593.9	458.5	77.2	1,058

Source: BPLS compensation report on [www.bpls.go.id](http://www.bpls.go.id) (2013)

Note: \* Presidential Decree 14/2007

\*\* Amendment I-V of Presidential Decree 14/2007

Lapindo must have compensated the victims of businesses affected by the mudflow. The compensation is called Business-to-Business (B-to-B) compensation. At least 25 large companies and 740 micro businesses had been affected by the mudflow. Only 14 of the 25 companies received the 20% of compensation price as down payment, but it is still unconfirmed by BPLS itself. As the Lapindo has closed official data to BPLS<sup>14</sup>, BPLS cannot confirm the actual achievement. Unfortunately, as the Presidential Decree 14/ 2007 does not regulate the compensation for businesses, the central government cannot enforce Lapindo to pay the compensation of business loss.

According to a claim report of affected companies submitted to the Lapindo on 23<sup>rd</sup> of November 2006, there were 87 companies including state-owned electricity company (PLN), the telephone company (PT. TELKOM), and the railway company (PT. KAI) that required compensation of the mudflow damage totally 44.4 million USD (BPK-RI, 2007, p.158-165). Lapindo claimed that they already provide financial assistance 47,435.7 million USD for the B-to-B compensation<sup>15</sup>. But the compensation only realized 1.3 million USD. Regarding to the compensation for the absence from work caused by the inundated of factories<sup>16</sup>, Sidoarjo local government reported that at least 199 workers of 4 companies were fired by the 15<sup>th</sup> January 2007 (BPK-RI, 2007, p.158-165). Lapindo were not able to pay the compensation even for the business loss<sup>17</sup>.

### 3. Land Acquisition and Resettlement

#### (1) Land Acquisition

Lapindo was obligated by the presidential decree to acquire the victims' property which

<sup>14</sup> Interview with a BPLS officer, 5<sup>th</sup> June 2013.

<sup>15</sup> Bakrie Social Impact Report: Sidoarjo Mud Volcano 2013, 14.

<sup>16</sup> Lapindo provide them 2 months salary/77.8 USD each month (agreement between Lapindo, workers, and the factories owner).

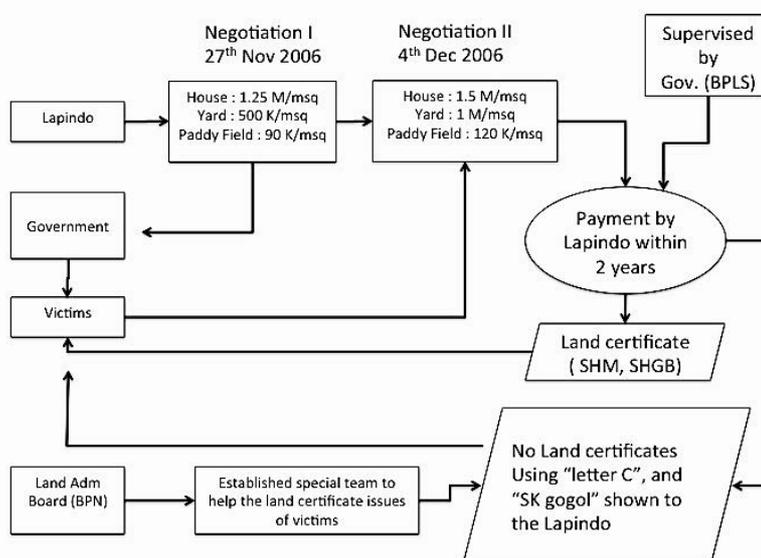
<sup>17</sup> <http://www.tempo.co/read/news/2013/02/27/078464054/Pengusaha-Korban-Lapindo-Bakal-Gigit-Jari> 27<sup>th</sup> February 2013.

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equivalent or more than market price. So far, this process then we called as compensation. The compensation values were decided by a meeting between the victims, Sidoarjo district and the central government held on the 27<sup>th</sup> November 2006 and it was proposed to Lapindo<sup>18</sup>. Lapindo approved it on the 4<sup>th</sup> December 2006<sup>19</sup>, as shown in figure 3. Lapindo stated several points in the approval letter as follows:

- Approved compensation value by Lapindo are: House is 1,500,000 IDR (166.7 USD)/m<sup>2</sup>; Yard is 1,000,000 IDR (111 USD)/m<sup>2</sup>; and Paddy field is 120,000 IDR (13.3 USD)/m<sup>2</sup>.
- Land ownership and land use certificate (SHM20, SHGB21) as an evidence for measuring property value;
- Compensation (purchased money) will paid within 2 years: 20% as down payment, 80% deferred quittance;
- Reply to the request for land verification officially regarded as Sidoarjo local government.
- Lapindo will provide a new resettlement area for the victims.

**Figure 3. Compensation Payment Flowchart**



Source: Author's interviews with BPLS officer and villagers in March 2012.

<sup>18</sup> Letter from Head of Timnas PLS to the Lapindo, 27<sup>th</sup> November 2006.

<sup>19</sup> Letter from Lapindo to the central government, 4<sup>th</sup> December 2006.

<sup>20</sup> SHM: *Sertifikat Hak Milik*/ Right of Ownership Certificate, the highest level of property right based on Agrarian Law 5/1960.

<sup>21</sup> SHGB: *Sertifikat Hak Guna Bangunan*/ Right of Building Certificate, the right for constructing house or building on state's land or someone's land with the duration for 30 years. Usually it is issued to private or state owned companies for business purpose.

One of crucial problems was not all the victims had land ownership certificates. This became a big issue, because the Lapindo's legal team's lawyers suggested not paying the compensation to the un-certified lands or houses<sup>22</sup>. Regarding to this issue, the head of Land Administration Agency (BPN) stated that the un-certified assets still could be the objectives of compensation and BPN would establish a special team to verify victims' land property<sup>23</sup>.

Lapindo, however, didn't pay. Hence, a big demonstration was held by thousands of villagers on 27<sup>th</sup> April 2007 to claim their unpaid compensation<sup>24</sup>. Couple of days before, some villagers also held demonstration in front of Presidential office in Jakarta<sup>25</sup>.

Afterwards Lapindo reducing their claim from the victims who didn't have their property certificates, several types of official letters/ records they kept, i.e., "letter C"<sup>26</sup>, and "SK Gogol"<sup>27</sup> became regarded as the evidence of their property rights on lands. Lapindo was requested to support Sidoarjo local government and Land Administration Board (BPN) for verifying the land/ house ownership based on the evidences. The payment was started on 11<sup>th</sup> July 2007 (Davies R, et.al., 2009, p.28-34).

As the Lapindo itself handled the payment process, the government couldn't access to the full data on the compensation process<sup>28</sup>. The monthly report of the BPLS on the 10<sup>th</sup> December 2012 opened that the 13,172 HHs had received compensation but the 65 HHs had not because of several reasons.

- The victims not identified became untraceable due to losing contact with BPLS;
- Ownership conflicts among family members<sup>29</sup>.

27 fixed that the land ownership rights can be removed due to the lost of land due to natural disaster, and the right of ownership belong to the state (Achmad, 2008, p.19-21).

Lapindo, however, purchased victims' property regarding as private ownership. Whereas, according to Agrarian Law and Government Regulation No. 38/1963, a company is prohibited to

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<sup>22</sup> They consider that the un-certified land/houses could be a new problem in the future (Jawa Pos 14<sup>th</sup> December 2006 in <http://hotmudflow.wordpress.com/2006/12/14/tanah-harus-bersertifikat/>).

<sup>23</sup> Suara Surabaya, 10<sup>th</sup> December 2006.

<sup>24</sup> <http://hotmudflow.wordpress.com/2007/04/27/korban-lapindo-gelar-unjuk-rasa-terbesar/>.

<sup>25</sup> <http://hotmudflow.wordpress.com/2007/04/25/presiden-dan-wapres-berebut-simpat-warga-perum-tas-i/>.

<sup>26</sup> "Letter C" letter basically not certificate, only a written evidence of landowner tax collecting before The Law of Principles Agrarian/Land established on 24<sup>th</sup> September 1960 (Suparyono 2008, 103.)

<sup>27</sup> "SK Gogol" is letter of "customary land" ownership, which is the village's land assets that given to personal, issued by the village head. Hence, land title transfer from SK gogol must be registered by the BPN (Wibowo 2007, 35).

<sup>28</sup> Email correspondence with BPLS's Public Relationship on 5<sup>th</sup> June 2013.

<sup>29</sup> Davies R., et al 2009, 99.

have the right of ownership (Hak Milik).

A company is allowed to obtain the right of exploitation (Hak Guna Usaha), the right of building (Hak Guna Bangunan) and the right of use (Hak Pakai)<sup>30</sup>. Those rights are fulfilled if the land is owned by state or individual (which is impossible for individual to own because the large of area)<sup>31</sup>. The legal status of the lands acquired by the Lapindo is ambiguous, because a company cannot obtain the right of ownership of land. Not only those, the victims' ownerships themselves were not clear. A BPLS officer said that BPLS were not sure the victims' land status before purchasing by Lapindo<sup>32</sup>.

On the other hand, village's assets including village's farming lands, village's office lands, communal graveyards, irrigation canals and their facilities, etc. were not compensated by Lapindo or any other government institutions. These assets were owned and managed communally by villagers. To maintain and manage those communal assets, villagers retained, for instances, traditional village administration for communal land (*gogol* or *tanah kas desa*), irrigation association (*dharma tirta* or *huluhulu*), and institution for communal roads maintenance (*gotong royong*), night watch (*ronda*), etc. These are regarded as the core of social capital of Javanese villages, however, they were posed, lost or dismantled from the society. Villagers lost not only their assets but also very important social capital.

## (2) Resettlement

Basically, the presidential decree regulated only the way of compensation in a manner of 20% down payment and 80% deferred payment within 2 years. BPLS did not assume any problems in the compensation process. One year after the start of the disbursement, Lapindo encounter financial problems. Instead of paying off the deferred payments, Lapindo offered the following alternative schemes.

- 1) "Cash and a new house for resettlement", is a combination of 20% down payment in cash and provision of a house in a new housing zone called Kahuripan Nirvana Village (KNV)<sup>33</sup>.

The new house is equivalent of the 80% total payment. If the new house value is less than

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<sup>30</sup> Law 5/1960, article 20-40; and Government Regulation 38/1963, article 1.

<sup>31</sup> The maximum area that allowed to own by individual is 20 ha (Government Regulation 56/1960 regarding of Determination of Agricultural Land Area).

<sup>32</sup> Email correspondence with BPLS' Public Relationship on 26<sup>th</sup> June 2013.

<sup>33</sup> KNV is a designed resettlement area provide by the Lapindo for the victims. It located near Sidoarjo downtown but far from their origin village. The villagers felt uncomfortable to live there because they had to adapt from rural to urban life style.

80% of total compensation, the victims can get the residual as monthly payment. On the other hand, if the price is more than 80%, the victims must install the difference to the Lapindo through the executing agent company<sup>34</sup>.

- 2) “Cash and monthly installment” (namely as cash and carry by Lapindo), is a combination of 20% down payment in cash and 80% monthly installment. The monthly payment was fixed 1,666.7 USD but the duration of payment depends on the total amount of the compensation.

These two disbursement schemes were feasible on the base of mutual cooperation and consent between Lapindo and victims, particularly evaluation of the lost asset value. These schemes are not regulated by the decree but based on the agreements between the two (Davies R, et.al. 2009, p.119-122). The victims separated several groups negotiated with Lapindo individually and made agreements respectively.

There were several housing areas for resettlement that were managed by Lapindo and by victims themselves. Basically there are three types of resettlement schemes:

- 1) Kahuripan Nirvana Village (KNV) housing zone:

It was designed and provided by Lapindo. It is located near Sidoarjo downtown (about 4 km from the Sidoarjo downtown and about 18 km from the mudflow area).

- 2) Group-housing zone called Renojoyo area:

The victims group led by 7 community leaders prepared it. It is located in the same sub district with their original village in the mudflow area, about 18 km from the Sidoarjo downtown and about 7 km from the mudflow area.

- 3) Individually selected housing:

The location of resettlement is mostly unknown or untraceable.

Renokenongo, Jatirejo and Kedungbendo villages were entirely disappeared by the mudflow. Among the three villages, Renokenongo seems the most interesting area to be surveyed, because it has variety in resettlement decision comparing with the others. In fact, the victims situation of ex-Renokenongo villagers can be surveyed only in Renojoyo. In the other resettlement areas, however, as victims' address couldn't be identified, it was impossible to reach and to know their

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<sup>34</sup> This scheme is implemented by PT. MMS, an agent company assigned by Lapindo. This scheme started in 2008, but victims rarely received/ pay from/ to Lapindo the deficit/ the surplus between the 80% of compensation and the house value.

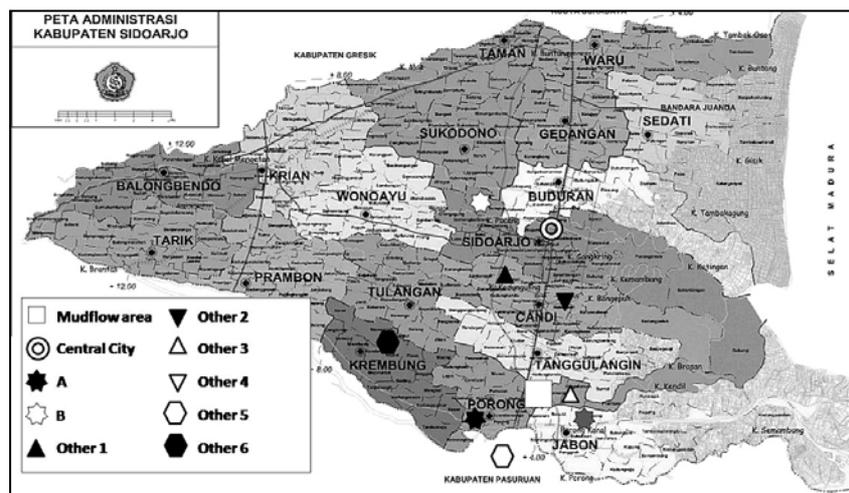
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recent living situation.

During their stay in the temporary evacuation camp in “Pasar Baru Porong” from June 2006 until early 2009, about 4,000 households were offered by Lapindo to resettle to the KNV, using cash and a new house for resettlement scheme. But not all villagers were interested in this offer<sup>35</sup>. In mid 2009, about 400 out of total 1,325 households of Renokenongo village decided to establish a group called “Pagar Rekontrak” and rejected to move to the KNV. This group decided to move to a new village called Renojoyo in early 2010.

Distance average of resettlement area from mudflow and Sidoarjo downtown are respectively 7.1 km and 12.6 km. The distance of Renojoyo area, however, is further from the downtown than KNV area (Renojoyo 17 km, and KNV 4 km). It is interesting to find out what made mostly of Renokenongo villagers chose Renojoyo than KNV. Figure 4 shows the locations of resettled areas from the mudflow area or downtown center of Sidoarjo.

**Figure 4. Housing Preferences Map of Victims**



Source: Map by Sidoarjo District, data by Author's Field Survey in March 2012.

According to the survey conducted by author in March 2012, 400 households out of 1,325 households of Renokenongo village chose Renojoyo. The households selected Renojoyo were mostly daily worker or farmer. They did not choose KNV because of the reasons why the accessibility to working place or the beautiful scenery of the modern residence could not be attractive for the villagers. The mutual relationship among relatives was a significant factor to

<sup>35</sup> Interview with Mrs. Siti, Renojoyo villager, and also one of group leader, 13<sup>th</sup> March 2013. She said that mostly the Renokenongo villagers were farmer and labor, and they worried that cannot do daily activity at the KNV. Also they think that living in the downtown residential area is expensive for they, villagers.

consider the selection of resettlement estate. On the other hands, about 50 households KNV whose main jobs was office employee preferred the accessibility to their workplace<sup>36</sup>.

The 875 of 1,325 households individually selected another housing area instead of Renojoyo and KNV. A villager (44 y.o) who worked as a street vendor of selling meatball and now lives in Ngering, chose the outside of their community. As he didn't want to live in temporary camp, he didn't join the group (Renojoyo or KNV) and got his new house in 2008 at Ngering. If he joined the resettlement group, he must have waited until 2009 or 2010 to get his new house. He is one of an untraceable victims who cannot be identified their addresses, living conditions and administrative status, etc by the BPLS. They are the majority of the victims<sup>37</sup>.

#### **4. Present Situation of Victims**

##### **(1) Households Economy**

Sidoarjo mudflow obliged many victims to change their jobs. This area is basically agrarian area and paddy fields largely spread out, but due to the extremely high density of population many villagers have worked for nonagricultural sectors such as petty traders and other informal jobs (see Table 6). Increased population has become hard to inherit the ancestors' farmlands. This trend is accelerated by the large-scale inundation of the paddy fields.

Table 6 shows the impact of the mudflow on household economy comparing before and after the resettlement. Many villages changed their jobs. Due to such change, Income of household head (USD/month) decreased by 23.5%. Total household income (USD/month) decreased by 19.1%. Asset value (USD/households) substantially decreased by 35.1% after resettlement.

Living condition such as distance to job place increased by 77.8% from 5.4 km to 9.6 km. Time distance (minutes) increased by 56.8% and cost (USD/day) increased 100%. They have to pay double for the cost of daily transportation between their homes to their job place. Before resettlement, monthly transportation cost around 10 USD/month (7.4%) and after resettlement monthly transportation cost jumped up 20 USD/month or 19.3%. The burden of transportation shares nearly 20% and become severe.

The Sidoarjo mudflow disaster made hardships to the villagers in terms of employment, income and job conditions such as the distance to reach their job place. Farmers lost their farming land could not utilize their farming skills and experiences. He must have worked for the jobs without skills or

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<sup>36</sup> Putro 2012, 27.

<sup>37</sup> Interview with Mr. Subadi, 14<sup>th</sup> March 2012. We met him at Perumtas II's local market ( $\pm 10$  km from his house).

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experiences. There seem no effective supports of the government neither to seek new jobs nor to obtain new skills. Some people like the interviewee utilized the compensation money to obtain new house and job. They have struggled with the drastic change of economic and living conditions, yet they seem to cope well with such reducing income and survive. It is, however, not clear whether all of victims have received the compensation and cope well with the impacts of the disaster.

**Table 6. Households' Economy of the Surveyed Victims**

Income and Assets	Before Resettlement	After Resettlement	Differences	Percentage %
<b>Employment</b>				
Office employee	7	7	0	0
Farmer	4	0	-4	-400
Agricultural wage worker	6	0	-6	-600
Off farm daily wage worker	19	19	0	0
Trader	17	17	0	0
Informal job	46	50	4	8.7
Unemployment	5	11	6	120
<b>Income and Assets</b>				
Income of household head (USD/month)	135.5	103.6	-31.9	-23.5
Total household income (USD/month)	177.3	143.4	-33.9	-19.1
Asset value (USD/households)	23,502.8	15,247.4	-8255.4	-35.1
<b>Distance to job place of household head</b>				
Distance (km)	5.4	9.6	4.2	77.8
Time distance (minutes)	22.0	34.4	12.5	56.8
Cost (USD/day)	0.4	0.8	0.4	100.0
Sample number	104			

Source: Author's Field Survey in March 2012

Note: Informal job means unstable and/ or part time base employment that includes street vendor (i.e. snack sellers), ojek (motorcycle taxi) driver, parking lot guardsman, etc.

## (2) Untraceable Victims and Social Capital

Forced-displacement could make some relatives (blood tie: husband, wife, child, grandchild, nephew, etc.) separate into different resettlement areas and make difficult to meet each other. According to the authors' survey, 104 households reported that they had totally 212 people of relatives living within the same village, but 61 out of 212 were separately settled.

Lost of relatives and neighbors could make the governments difficult to reach the untraceable victims. The governments need to pay more attention to the mutual and daily relations among victims so as to understand the living conditions of the victims, otherwise the recovery program of mudflow disaster cannot be done well.

The mudflow victims had lost their social relationship with their colleagues, neighbors, and

even relatives after forced displacement. According to author's survey, about 21% of relatives were separately settled. The new neighborhood's social relationship, however, would slightly decrease than previous neighborhood.

Social capital means the social relation based on community ties and it enables to do collective actions. It supports various activities of the community members and protects them from various hardships. Putnam (1993) defined the social capital as follow:

“... features of social organization, such as trust, norms, and networks, that can improved the efficiency of society by facilitating coordinated actions”<sup>38</sup>.

The involuntarily resettlement after mudflow disaster triggering a social capital loss that causes various social problems as follows:

- (1) No community bounding among victims in the new area. As evidence, there were no community groups (RT, RW) in the new resettlement area (Renojoyo and KNV);
- (2) Lack of trust among neighbors in the new area as used to be among villagers. They have difficulties to communicate with their neighborhood in the new area. They feel like strangers even if having similarity as victims;
- (3) Lost of network among villagers, which is proven by the separation with their relatives and former neighbors. It causes the difficulties to access latest information among them, and also loss of business opportunity for businessmen.

Department for International Development (DFID) of United Kingdom (1999) defined the social capital by the three elements of development: Networks and connectedness; Membership of more formalized groups; and Relationship of trust, reciprocity and exchanges<sup>39</sup>.

The community activities to maintains their social capital as follows:

- (1) Networking and groups (or organizations) are essential elements to maintain social capital. In Renojoyo, the villagers experienced that they needed to maintain their social capital through establishing a group for resettling. Grouped people could maintain their own identity and retain their vested interests coming from their village community. They decided to make a group called Pagar Rekontrak in 2007 comprising of about 400

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<sup>38</sup> Putnam 1993, 169.

<sup>39</sup> DFID 1999.

households' members. It aims to manage a new resettlement estate based on their wish. This group was lead by 7 leaders of different background each other, i.e., teacher, businessmen, or unemployment.

(2) Noteworthy change is that they promptly made new relationships after the resettlement. The most helpful means of maintaining peoples' relationships is a social gathering like "Arisan" Javanese culture among villagers. This gathering is usually held at least once a month. Many of arisan in Renojoyo started after November 2011. Several types of arisan/quasi arisan were observed as follows:

- Regular arisan: It is held regularly with a certain interval i.e. once a week and each member alternately gets the money and it continues until all members receive the money<sup>40</sup>.
- Special occasion arisan: It is held once a year before a Muslim feast day "Lebaran". This arisan does not do a lottery. A fixed coordinator collects money every week.
- Tahlil: This is not kind of arisan but social gathering in fact, but it maintains effectively social capital of villagers. The villagers are gathered every Thursday night at a host's house, read a holy Qur'an and meals mainly prepared by females are provided to all participants. The host is appointed voluntarily, not obligation.

A mutual aid practice, like these arisan, enables to frequently meet each other and to strengthen mutual ties. It can be regarded as a kind of social capital. Putnam (1993) says:

Arisan is commonly viewed by its members less as an economic institution than a broadly social one whose main purpose is the strengthening of community solidarity. ... Thus, as in rural java, the rotating credit association is more than a simple economic institution, it is a mechanism strengthening the overall solidarity of the village.

As with conventional capital, those who have social capital tend to accumulate more. Success in starting small-scale initial institution enables a group of individuals to build on the social capital thus created to solve larger problems with larger and more complex institutional arrangement.

Even though an arisan is less advantageous in the sense of economy, it contributes to

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<sup>40</sup> How to manage arisan: for example there were 20 members, paid 70-cent USD weekly. Every Saturday a coordinator manage lottery, and who win the lottery get the collected money and will be the next Saturday host. But special dealing is that not all of collected money is given to the winner, but they keep some deposits, 10-cent USD/person/week (total is 10-cent x 20 = 2 USD/week). Hence, the winner only get lottery 60-cent x 20 = 12 USD. The deposit money was used for social activity among members, i.e. to visit and to help a sick member or her family, etc.

strengthening the solidarity among the villagers. In the new resettlement estate, the collectively resettled people have reestablished various arisan. Those cultural activities at least could triggering social bond among communities, which is develop trust and network among community to survive in the new resettlement area.

### (3) Loss of Civil Rights

The government implementation agency/ BPLS didn't have the comprehensive data on the victims. In the compensation payment process, Lapindo collected all victims' data, but the data is not disclosure yet as mentioned earlier<sup>41</sup>. There are only about 2,600 households (18%) of total 13,237 households that can be monitored. All of them are living in KNV or Renojoyo.

Inundation by mudflow deprived villages' administration function after forced-displacement. Sidoarjo local government administratively didn't recover the registration data. The local government just keeps old addresses of disappeared villages (i.e. Renokenongo and Kedungbendo). As its result, the villagers of those villages have no civil status after they leaved from the villages.

According to several Renojoyo's villagers who lived there since early 2009, they cannot administratively move their addresses status to the new administration office of Renojoyo and still recognized as Renokenongo villagers. This is partly caused by the no settlement of their compensation dispute with Lapindo which gazes victims' asset certificates. To enable the administration services for the victims, the local government needs to immediately transfer the administration of the totally inundated villages of Renokenogo and Balungbendo to the Porong sub district office (about 10 km of their house)<sup>42</sup>.

On the East Java Governor election in August-September 2013, about 17,000 people, mostly from mudflow victims cannot join the election because they didn't report their new address after resettlement<sup>43</sup>. To cope with the situation, the authorized institution for election gives leniency policy for certain persons. The information, however, is not effectively socialized personally to the person, but only by mass media<sup>44</sup>. It is feared that they couldn't join the general election of 2013-2014, because the government verifies the data based on their origin villages (whose administrations don't work up to present).

Administration failure causes various civil rights problems as follows:

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<sup>41</sup> Phone interview with BPLS officer, 7 June 2013.

<sup>42</sup> Interview with Mrs. Siti, Renojoyo villager, and also one of group leader, 13<sup>th</sup> March 2013.

<sup>43</sup> <http://www.metrotvnews.com/metronews/read/2013/08/19/6/175661/17.169-Warga-Korban-Lumpur-Lapindo-Terancam-tidak-Bisa-Memilih-di-Pilgub-jatim>

<sup>44</sup> <http://regional.kompas.com/read/2013/08/19/1724373/Korban.Lumpur.dan.Pengungsi.Syiah.Bisa.Nyoblos.di.TPS.Terdekat>

- (1) They don't get civil status from the new village administration after resettlement, they lost even their voting rights;
- (2) Financial institutions (i.e. Bank, cooperation) limit their fund service for the victims because of their lost administration status;
- (3) Sometimes the victims cannot get the free charge of hospital services for the poor people;

These problems threaten the human security and spoil the human rights. Urgent recovery of the civil service administration is essential to stop such critical problems.

## **5. Conclusion**

This paper reviewed the implementation and the procedures of compensation for the victims and also the responsiveness of the government for the untraceable victims after Sidoarjo mudflow disaster. Fact-findings and implication from authors' field research are as follows:

First, the series of countermeasures were authorized and launched by enacting the Presidential Decree in 2007. The decree established a government institution called BPLS and (unfortunately only) obligates the Lapindo to purchase (acquisition) the loss assets of the victims, instead of compensation payment, caused by the lack of governance. The incident of mudflow in Sidoarjo, however, is regarded as natural disaster not industrial accident by Indonesian court. Hence, making the government must have responsibility to the victims. Due to this situation, neither any people nor any institutions can be free from criminal prosecution. Stakeholders committed in the incident (disaster) are the victims, Lapindo and the governments.

Second, land acquisition done by Lapindo became just a business of land transaction. However, the land titles of the purchased from the victims are obscure. Victims mostly did not have land certificate authorized by the Agrarian Law and besides Lapindo, as a private company, cannot obtain the ownership title (Hak Milik). It cannot obtain private ownership right but just the right of exploitation (Hak Guna Usaha), the right of building (Hak Guna Bangunan) and the right of use (Hak Pakai). Ultimate, land ownership and title of the inundated lands are not clear. The rights of victims on lands are weakened and losing.

Third, after the resettlement, the governments and third party can monitor only small share of total victims, but the others are administratively unidentified. Lapindo does not yet disclose victims' data and this makes hard the governments provide administrative services to the victims. Their addresses after resettlement are not monitored and they lost not only administration services but also

even voting rights. Due to the lack of governance particularly land governance, the victims have been losing their civil rights after mudflow disaster. Victims are now under the critical condition in the sense of human security and human rights. Government cannot fully trace the victims' present situation.

Fourth, victims' households got economic loss (income and job opportunities) after resettlement. More critical impact, however, was that the implementation of involuntary resettlement deprived villager's' lands and traditional institutions which were regarded as social capital. Most victims lost their contacts with their previous neighbors and separated from their relatives after resettlement. Community bounding, trust among neighbors, and networks and various groups of people that maintain social capital were lost after resettlement. Fortunately, some victims made groups and preferred to live together in a new area where the resettlement was voluntarily arranged by them. It is helpful if they maintain their social capital.

Fifth, this study revealed the dismantlement of social capital and its impact. The reduction of or collapse of social capital induces very critical condition of human insecurity particularly under the lack of governance like the Sidoarjo incident. People can become disassemble and detached each other. Some victims became untraceable or missing. Local government administration can not identify those victims and finally they could loss their civic rights including voting right. Sidoarjo case shows that the dismantlement of social capital could cause the lost of human rights and the threat to human securities. This is induced and accelerated by the lack of governance. It can be said that the governance and social capital could be complementary each other and social capital could support the disaster victims even though the governance is deteriorated. Sidoarjo case, however, implies that the lack of governance can induce the dismantlement of the social capital and eventually cause the serious human insecurity of people and community.

Finally, the large-scale disaster of Sidoarjo mudflow incident caused serious and critical impacts but many people tend to reduce their concern about the victims. The untraceable victims are in the process of disappearing from the people's view. The lack of the governance and of the peoples' concern could delay the recovery of the vulnerable situation of the victims.

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## **Triangular Public and Private Partnership (PPP) to realize Human Security**

Kyoko Tokuda<sup>1</sup>

### **Abstract**

This research paper examines a tripartite PPP (Public and Private Partnership) realizing the concept of Human Security among the Government of Japan (GoJ), International Organizations (IOs) and Japanese companies.

The Secretary General's High Level Panel on the Post-2015 Development Agenda released its report at the end of May, 2013. The report referred to human security in the same paragraph which mentioned the importance of transforming the economy through inclusive growth caused by sustainable consuming. The private sector has been the key actor in addressing these global issues.

This paper represents two cases of tripartite PPP projects which aim to promote the human security of vulnerable populations. One case discusses the IO-led project, utilizing a small enterprise's technology to provide emergency humanitarian assistance. The other, illustrates a large enterprise (LE)-led developmental assistance project with a longer-term vision. GoJ and the IOs have provided resources such as financial and human resources to both projects. The resources gathered by the three actors could possibly resolve the complex and multidimensional threats that challenge the survival, livelihood and dignity of individuals.

The multi-sector projects were implemented in a mutually complementary manner. Triangular PPPs can be an effective tool for translating "human security" into concrete action, playing an extraordinary role in risk reduction for both the public and private sectors.

### **Keywords:**

Human Security, Business, International Organization, PPP, MDGs

## **1. Introduction**

### **1.1 The need for transformative shifts for post-2015**

In July 2012, as part of the UN Secretary-General's post-2015 initiative mandated by the 2010 MDG Summit, a High-Level Panel (HLP) commenced its advisory role on the global development framework beyond 2015, the target date for Millennium Development Goals (MDGs) (United Nations, 2012). The main criticisms toward MDGs are summarized in "MDGs are donor-led" and "MDGs neglect the poorest and most vulnerable"(Melamed and Scott, 2011, 2). The HLP tried to

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respond to these criticisms and spend more time and resources on discussing new developmental goals among the various actors<sup>2</sup> including the private sector. The members of the High-Level Panel include the representative of the private company, Unilever<sup>3</sup>.

The final report edited by the HLP acknowledges the success of MDGs. The members of the Panel have agreed with the "remarkable success" in setting MDGs since the 13 years following 2000 have seen the fastest reduction in poverty in human history. On the other hand, they concluded that "it would be a mistake to simply tear up MDGs and start from scratch (United Nations, 2013b, 7)." The report insists that five shifts are essential for the post-2015 development agenda. Having received the landmark report of the HLP in May, 2013, the Secretary-General is expected to represent his vision on the post-2015 initiative at the end of September, 2013. It is time that the international community re-examined both the approach and the stakeholders, noting the positive lessons-learned through MDGs. The public sector is no longer the only implementer of MDGs. One of the significant shifts for post-2015 is expanding the actors involved in the development agenda. As one of five shifts, the Panel proposed the concept "No one left behind" for post-2015, which means, in turn, that everyone takes responsibility. Apart from traditional donors such as DAC countries and IOs, the private sector is also expected to confront global issues. "The Busan Partnership" describes the private sector including private corporations as important actors that ought to pursue collaborative efforts (CSO Network, 2012, 20). This trend is partly caused by the fact that "private investment in developing countries now dwarfs aid flows (United Nations, 2013b, 7)." In response to this trend, in Monrovia, the HLP centred the discussion mainly on business showing the importance of private participation seriously<sup>4</sup>.

## 1.2 Human Security as a basic concept of post-2015

In addition to enlarging the stakeholders, the approach is also to be re-examined. The human

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<sup>2</sup> (United Nations, 2013b, 7) states that "we listened to the views of women and men, young people, parliamentarians, civil society organizations, indigenous people and local communities, migrants, experts, business, trade unions and governments" Also, the High-Level Panel encourages everyone in the world to join the global survey called "MY World", aiming to capture people's voices, priorities and views. MY World is a global survey for citizens led by UN and its partners. Its results will be submitted to the High-Level Panel on post-2015. (Source: MY World web site <<http://www.myworld2015.org/?page=faq>>accessed on 8/4/2013) Considering the inclusiveness, the MY World survey is designed to be accessed using mobile phones and the internet.

<sup>3</sup> Mr. Paul Polman is a member of the High-Level Panel on the Post-2015 Development Agenda. He is the Chief Executive Officer of Unilever. (Source: UN, 2012. "Note to correspondents - UN Secretary-General Appoints High-Level Panel on Post-2015 Development Agenda" <<http://www.un.org/sg/offthecuff/?nid=2455>>accessed on 8/4/2013)

<sup>4</sup> Source: Beyond 2015, Monrovia Meetings(28-30 Jan 2013) <<http://www.beyond2015.org/monrovia-meetings-28-30-jan-2013>> accessed on 8/31/2013: UN Secretary General, Communiqué from the Meeting of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda in Monrovia, Liberia <[http://www.un.org/sg/management/pdf/Monrovia\\_Communique\\_1\\_Feb\\_2013.pdf](http://www.un.org/sg/management/pdf/Monrovia_Communique_1_Feb_2013.pdf)> accessed on 8/31/2013

security approach is thought to play a role in the post-2015 development agenda. How does the post-2015 development agenda relate to human security? The second General Assembly resolution on Human Security was adopted in 2012. The Secretary General stated during a speech given in May, 2013 that:

The goal is always to empower people, bring different actors together and generate holistic responses to complex challenges. We are now working to accelerate progress on Millennium Development Goals while preparing a post-2015 development agenda. In all these efforts, we must consider human security as a central factor. The new General Assembly resolution provides the basis for adopting a human security approach across the United Nations system. " (United Nations, 2013c)

Mr. Takasu, the United Nations' Under-Secretary-General for Management, acknowledged GA resolution 66/290 as "indeed a significant milestone" which marks the first time the Assembly has agreed by consensus on a common understanding on the issue of human security since discussions began in 2005(Takasu, 2013, 1).

According to (UN OCHA, 2013b, 2-3), the appraisals of human security from UN member states and IOs are:

- The human security approach can be instrumental to accelerating the implementation of MDGs and the post-2015 development agenda.
- The human security approach has contributed more generally to coordination and collaboration among UN country teams and their partners, which means it is an effective means of addressing cross-cutting challenges.
- The human security approach has contributed to improving cooperation between UN country teams and their host governments, which not only reduces the administrative burden on local Governments, but also empowers them.
- "A human security people-centered approach has contributed to building capacity and empowering local partners and community members", so that its impact is more likely to last in the long term. .

However, the GA resolution on human security does not include the whole world nor totally removes the criticism toward its concept. There remain some important constraints in terms of implementing a human security approach which were revealed in the survey on human security sent

to all member states and other stakeholders at the beginning of 2013. According to Mr. Takasu's analysis, its result indicated that even UN agencies and donors had an incomplete understanding of the human security approach. The lack of common understanding of its approach could be “an obstacle in terms of implementing integrated multi-sector programs (UN OCHA, 2013b, 3)”. Ms. Ogata, urgently emphasized human security as a practical concept, stating that

we have produced a powerful operational tool to address problems and provide solutions through concrete action. Those challenges and actions to be taken are enormous. Instead of an abstract discussion, the U.N. enabled the commission to initiate a concrete means of addressing the challenge.” (UN OCHA, 2013a, 3)

Once the concept of human security is recognized as a practical one, it could be the basic concept of the post-2015 development agenda. The impact of the transformative shifts which the HLP proposed also depends on how they are translated into specific action (United Nations, 2013b, 9). Providing concrete cases of actions promoting human security should be a short cut to penetrating its concept. This paper focuses on the capability of businesses in collaborating with IOs and GoJ to translate the human security concept into action.

## **2. Business in Development**

The term "private sector" covers a range of diverse actors such as the ‘for profit’ enterprises, foundations i.e. non-profit organizations (Davies, 2011, 4). In this paper, the private sector is defined as organizations ‘for-profit’ only. Even ‘for profit’ businesses can differ in terms of size and ownership and include micro-enterprises and smallholders operating formally or informally, small and medium-sized enterprises (SMEs) and large domestic and multinational corporations (Lucci, 2012, 3). In Chapter Four, the first case describes the small-sized enterprise which is not listed on stock markets and the second describes the large multinational corporation. Both cases indicate the possibility of the role of the private sector as a partner in delivering on MDGs based on the concept of human security.

### **2.1 Trends and causes of doing business in developing countries**

#### **(1) External pressure and incentives in the Private Sector**

Resource scarcity and unstable purchasing urge private enterprises to confront global issues

such as climate change, child labour, transmittable diseases among others.

In addition to negative drivers, commercial incentives also serve as a motivating factor for direct engagement in development agenda in the private sector. Along with the concept of "Creating Shared Value," CSR activities have mitigated the risks of bad PR by providing positive impacts for companies; securing current supply chains as SAB Miller empowers local farmers (Lucci, 2012, 7); a positive impact on staff satisfaction as the Fast Retailing's internal job posting system<sup>5</sup>; stable labour power as Toyota Group offers the HIV testing and remedy for free of charge to the employee and their family in South Africa. DAC countries, the public sector, have various reasons to count on the private sector to be the one of MDG stakeholders. That is, the private sector is expected to address the emerging challenges such as decreasing ODA, complex and multidimensional issues, the limitation of traditional approach and the need for the innovative technology.

According to research conducted by the Hudson Institute, private capital flowing into developing countries surpassed the funding levels of ODA at the beginning of 1990s, and have been continuing to grow (CSO Network, 2012, 1). The Busan High-Level Forum on Aid Effectiveness (HLF4) held at the end of 2011 highlighted the structural changes currently occurring in the international development field as a result of the emergence of new development actors, including the private sector (CSO Network, 2012, 19). At HLF4, Hillary Clinton mentioned that only 13% of capital flow to developing countries was represented by the public sector and insisted public resource was no longer the primary driver of economic growth (U.S. Department of State, 2011).

## (2) Shift in Public Policy

The World Bank and other traditional donors certainly criticized the international economic system and private cross-border business activities because the private sector had contributed to the depreciation of MDGs through pollution, deforestation, child labour, etc. Yet, global issues have recently become more complex and cannot be confronted with a single-sector-approach by the public sector. In addition to the efforts for the reduction of harmful private activities, the international community also started to encourage the private sector to contribute to global issues. The World Bank, UNDP and other traditional donors have evolved from a preventative approach of 'do no harm' to a more proactive 'do good' approach (Elliot, 2013, 144).

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<sup>5</sup> The young employees applied for starting the social business in Bangladesh through the internal job posting system, which is thought to lead to the employee satisfaction. (UNIQLO press release, 2010. The backstage of UNIQLO's social business <[http://www.uniqlo.com/jp/corp/pressrelease/2010/11/110118\\_mag2.html](http://www.uniqlo.com/jp/corp/pressrelease/2010/11/110118_mag2.html)> accessed on 8/11/2013)

Table 2.1: Development Agenda comes close to Business

1992	UN Rio Earth Summit
1994	UNEP Corporate Environmental Reporting report published
1996	ISO 14001(environmental management system)
1999	[Seattle riots @3rd WTO ministerial conference] Global Sullivan Principles created
2000	UN Millennium Development Goals(MDGs) UN Global Compact(10 principles)
2001	EU green paper on corporate social responsibility(CSR)
2002	Equator Principles UN World Summit for Sustainable Development(WSSD) UN Monterrey Conference on Finance for Development
2006	Principles for Responsible Investment(PRI)- coordinated by UN
2008	Business Call to Action(BCtA) -UNDP, DFID and others
2010	UN MDGs Summit-Joint statement of 11 key bilateral donor countries to support private sector partnership for development ISO 26000(CSR & human rights)
2012	UN Conference on Sustainable Development (Rio+20)

Source: Compiled from (Ohno, 2011, 9)

The development agenda is coming close to business as described in Table 2.1. At the latest, reviewing MDGs, the HLP concluded that the post-2015 agenda needed to be driven by the following "five big, transformative shifts"(United Nations, 2013b, 8-9):

- i. Leave no one behind.
- ii. Put sustainable development at the core.
- iii. Transform economies for jobs and inclusive growth.
- iv. Build peace and effective, open and accountable institutions for all.
- v. Forge a new global partnership.

In order to achieve the above, the international community needs not only traditional partners, like governments and non-governmental organizations, but also academics, businesses, philanthropists and others to help end poverty, promote development and establish peace (United Nations, 2013c). 2.2 examines the public sector's development policies which marry with the commercial objectives of the for-profit companies.

## 2.2 Recent policies of traditional donors including Japan

UNDP has been engaged in cooperation with the private sector since the 1990s. From 2000, UNDP has been embarked on "Business Call to Action (BCtA) to pursue programs under special UNDP initiatives. BCtA is a business network aimed at achieving the Millennium Development

Goals (MDGs) which also provides a platform for knowledge sharing regarding inclusive business (CSO Network, 2012, 13). As for the World Bank group, the International Finance Cooperation (IFC) developed the Development Outcome Tracking System (DOTS) as an evaluation framework in 2005. Its framework reflects economic, social and environmental indicators<sup>6</sup>. With respect to governments, the following chart illustrates that western countries began their support for business about 10 years before GoJ did.

**Table 2.2: Comparative table of supporting BOP business by main donors**

	United Kingdom	Germany	United States	Japan
Starts from	around 1999	1999	2001	2009
Authority	DFID	GIZ, DEG and SEQUA under BMZ's policy	USAID	JETRO, JICA and others under METI/MOFA's policy
Programme	<ul style="list-style-type: none"> <li>• challenge funds</li> <li>• local matching assistance by Business Innovation Facility (since 2010)</li> </ul>	<ul style="list-style-type: none"> <li>• developPPP.de instead of PPP facility (2009)</li> <li>• "Integrated PPP"(since 2004)</li> </ul>	<ul style="list-style-type: none"> <li>• Global Development Alliance (GDA)</li> <li>• integrates GDA and private sector engagement in local offices</li> <li>• Development Innovation Ventures(DIV) (since 2010)</li> </ul>	<ul style="list-style-type: none"> <li>• research, F/S support and so on</li> <li>• inspection tour</li> <li>• support for building partnerships</li> <li>• Japan Inclusive Business Support Center</li> </ul>
Target	no limit	German and European firms only (including overseas affiliated company)	no limit	Japanese firm only
Philosophy	Poverty reduction through business	<ul style="list-style-type: none"> <li>• Poverty reduction through business</li> <li>• German business support</li> </ul>	Poverty reduction through business	<ul style="list-style-type: none"> <li>• Poverty reduction through business</li> <li>• Industrial policy</li> </ul>

Note: Compiled from (Ohno, 2012, 32)

In Japan, METI, JETRO, MOFA, JICA and other public institutions have provided a variety of supporting schemes to private entities. JICA delivers collaborative projects to match business needs with local needs, along with the formulation of business models that ensure both business profitability and developmental impact. It used to be very difficult for GoJ to support particular private companies, but the recent industrial policy has gradually changed its conservative attitude partly because of the economic recession in 2008, the massive earthquake in 2011 and the recent so-called "Abenomics" industrial policy.

<sup>6</sup> Comprised of four elements: "(1) Financial Performance, (2) Economic Performance, (3) Environmental and Social Performance, and (4) Private Sector Development Impact.

### **3. Business for human security: "Inclusive Business" in PPP**

As (Davies, 2011, 6; Lucci, 2012, 7) admits, the private sector engages in and can contribute to development in a variety of ways: corporate philanthropy, advocacy and core business. Here, putting emphasis on sustainability<sup>7</sup>, this paper covers only core business. The regular concept of capitalism could lead to poverty reduction by raising the income of the poor, not by giving them goods for free (Hudson Institute, 2008, 6). Then, what type of business can solve the human security problem if BoP (the poor-targeted only as consumers) business is not employed in increasing the income of the poor? UNDP and World Bank Groups have the answer to the question: "inclusive business" can generate income of the vulnerable. (CSO Network, 2012, 13) explains that inclusive markets provide opportunities and choices for the poor, and inclusive businesses engage the poor in business activities through four different types of roles - as producers, consumers, entrepreneurs, and employees - creating mutual benefits for both the poor in society as well as businesses that seek profits over the near term .

When it comes to inclusive business, the public sector provides the essential enterprise resources: market information, social networking with the local government and academics, local language or cultural expertise and starting-up funds for private companies. (Davies, 2011, 3) highly evaluates the policy to promote inclusive business by mentioning that "new collaborations are forged, most notably so called public-private partnerships (PPPs), to combine the strengths of different stakeholders." This chapter examines PPP as a tool for promoting human security.

#### **3.1 The definition of PPP**

In the context of development, PPP can be described as a formalized cooperation between the government and businesses, in which the partners are expected to share risks, opportunities and responsibilities. PPP brings different stakeholders together, and explores what makes them work effectively and combines the competencies of the partners involved to address developmental challenges and objectives<sup>8</sup> (Davies, 2011, 4:24).

Precisely examined, there are different kinds of PPPs which vary according to factors such as the size and number of partners involved, the ratio of funding, time frames, geographical scope and focus areas etc. (Nemoto, 2011, 19-28; Davies, 2011, 24). Various organizations originally have

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<sup>7</sup> (Davies, 2011, 6) insists that core business is the most sustainable private sector contribution by saying that "donor respondents in particular emphasized that for-profit private sector contributions to the development process are more sustainable if they are embedded in the core business strategy of a company."

<sup>8</sup> Based on the definition of US AID, Ministry of Foreign Affairs of the Netherlands and McKinsey.

defined PPP as shown in the figure below:<sup>9</sup>

**Table 3.1(1): Definitions of PPP**

	National Council for PPP (NCPPP)	UN Economic Commission for Europe (UNECE)	Ministry of Economy, Trade and Industry of Japan	PPP Research Center
Target	delivery of the service and/or facility	public sector facilities and service	public service(including PFI and privatization)	delivery of the public service /regenerate local economy
Risk/Rewards	shares in the risks and the rewards	transfer of risks to the private sector	N/A	design of risks and rewards
Contract	contractual agreement	long-term service provision	N/A	governance based on contract
Period	N/A	long-term service provision	N/A	N/A
Privatize	N/A(note that the other documentations mostly distinguish between PPP and privatization)	there is no transfer of ownership and the public sector remains accountable	definitely include	include
Private Fund	N/A(note that it is not limited to private fund on other documentations)	N/A	N/A	N/A, not limited to private fund

Source: Compiled from (Nemoto, 2011, 22)

**Table 3.1(2): The role of PPP**

		Agent	
		Public Sector	Private Sector(For profit company)
Objective	Public Interest	Public Interest generated by Public Sector (NORMAL)	Private Sector realize the public interest (The role of PPP)
	Private Interest	Public Sector for Private Interest (Failure of Government)	Private Sector for Private Interest (NORMAL)

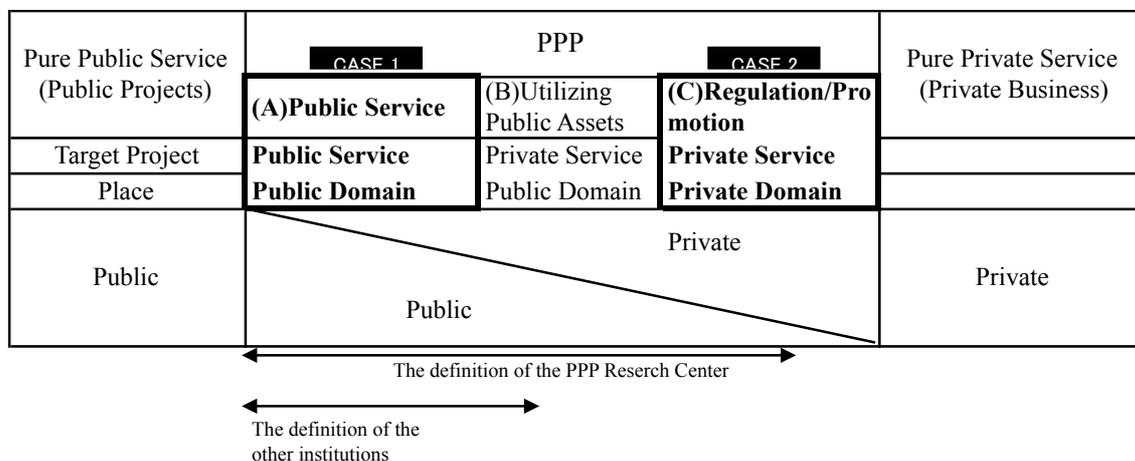
Source: Compiled from Nemoto, 2011, 23.

In Japan, according to (Nemoto, 2011, 19), METI firstly proposed its report using the term "PPP" in 2002. The PPP Research Center of Toyo University also comprehensively defines PPP. Based on its definition, the aim of PPPs is "re-building the regional economy." Poverty reduction prioritizes economic revitalization as opposed to merely delivering public services. PPP as defined in this paper indicates that public-private collaborations are aimed at rebuilding the local economy

<sup>9</sup> Also see Appendix 2, which explains the definitions of NCPPP and UNECE.

while sharing risks and rewards under a formal contract.

**Figure 3.2: Types of PPP**



Source: Compiled from Nemoto, 2011, 25-26.

### 3.2 A PPP model for implementing the concept of Human Security: Triangular PPP

In addition to the definition and classification of PPP, in the following case studies, the author has divided the public actors into two groups: IOs and the government. This is because IOs play different roles from the government although they also belong to the public sector. As seen in 2.2, IOs are more experienced in inclusive business, which translates enterprise resources into developmental resources. GoJ does not specialize in inclusive business although it leads the discussion on human security.

Three actors, for-profit companies, IOs and GoJ, mutually complement human resources, technology and financial resources. This triangular PPP could resolve complex and multidimensional issues in a sustainable manner. The following two cases are thought to serve as an effective model for realizing human security.

## 4. Cases

### 4.1 Overview

Table 4.1(1) illustrates the comparison of two cases. In spite of their differences, these cases had similar goals: resolving human insecurity in rural areas, exchanging resources among for-profit Japanese companies with IOs and GoJ and sharing the risks and rewards under a formal contract.

Triangular Public and Private Partnership (PPP) to realize Human Security

**Table 4.1(1): Comparison of Cases**

		Case1	Case2
Type of PPP		(A) Public Service	(C) Regulation and Promotion
Target Site		IDPs camp in Somalia	Rural Area in India
Aid Category		Emergency Humanitarian Assistance	Development Assistance
Lead Agency		International Organisation-led	Private Sector-led
Stakeholders	Private sector	Poly-glu Social Business Company	Itochu
	(Company Size)	The small-sized company	The large-sized company
	IOs	IOM	UNDP
	Government	Government of Japan	Government of Japan
Local Community		Water supply and maintenance of devices by local people (IDPs in Somalia)	Local small farm holders in India are preparing organic farming. Local companies produce and export the final products.
Project Period		2012-2013	2007-now
Sector of main issue		Health	Health
Most related MDG		MDG4 and 7	MDG7 and 5
Human Security Approach		Water→Heath→Economic Security	Agriculture→Health/Environment→Economic Security
Local Community Involvement		Purified water supply and maintenance of devices by local people	Local small farm holders are preparing organic farming. Local companies produce and export the final products.

Source: Author

Table 4.1(2) focuses on the roles and resources provided by actors in each phase. In addition to the companies, IOs and GoJ, the local people are also engaged in the value chain, which represents a feature of inclusive business<sup>10</sup>. The following cases aim at promoting the human security of vulnerable individuals in a sustainable manner, i.e. through securing business profitability.

Value Chain		(Plan)	(Re-search)	Procurement	Product/Service Development	Distribution	Sales and Marketing	Customer Service	(Next Market Development)
Case 1	Poly-glu Social Business Company				○	△	△		○
	IOM	○	○	△	△	○	○	△	○
	Government of Japan		○	○					△
	IDPs in Somalia					○	○	○	
Case 2	Itochu&Kurkku	○	○	△	△	○	○	△	○
	UNDP						○		○
	Government of Japan						△		△
	Farmers Companies			○	○	○		○	

Source: Author

Note: The terms of "value chain" are based on (IFC, 2011)

<sup>10</sup> Inclusive business models include the poor in a company's supply chains as employees, producers and business owners or develop affordable goods and services needed by the poor (UNDP, 2010, 7).

## **4.2 Case 1: Emergency humanitarian assistance by Poly-Glu Social Business Company (SBC), IOM and GoJ in Somalia**

### (1) Background and Human Security Issues

According to (Elliott, 2013, 81), an estimated 42 million people have currently been displaced from their homes by conflict or persecution<sup>11</sup>. Access to safe water which is closely linked to the refugee issue, is a primary issue in the world. It is estimated that 1.8 billion people worldwide may live in water-scarce environments<sup>12</sup>. Water scarcity currently presents a number of complex and interrelated global challenges for sustainable development (Elliott, 2013, 72).

The availability of drinkable water has a direct influence on human health particularly with regards to infants and children. As (United Nations, 2013a, 4) reported, a faster rate of progress is needed to meet the 2015 target of MDG4<sup>13</sup>. In Sub-Saharan Africa, especially, the treatment of diarrhea consumes 12 percent of the health budget. The UN believes that the provision of improved sanitation and safe drinking water could reduce diseases associated with diarrhea by nearly 90 per cent<sup>14</sup>.

In terms of Somalia, development and humanitarian indicators are among the lowest in the world. The drought which occurred in the Horn of Africa in 2011 and civil conflicts have placed 4.24 million persons in urgent need of safe and clean water and improved sanitation, out of an estimated population of 9.5 million. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) frequently raise alarms about the risk of outbreaks of water-borne diseases, and have flagged the South-Central region of Somalia, which hosts 1.36 million IDPs, as one the highest risk areas (Ito and Tokuda, 2013, 46). In addition, unregulated population mobility causes transnational crimes including piracy, human trafficking, smuggling, trafficking and terrorism to thrive. These problems are extensively intertwined and threaten human security in Somalia.

### (2) Flows and system structure

The triangular PPP project has been implemented by IOM, GoJ and Poly-Glu Social Business

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<sup>11</sup> With 15.2 million people living outside their country of origin as refugees. Furthermore, the worsening violence in Syria has increased the number of displaced people by more than 1.5 million (UNHCR, 2013, 6).

<sup>12</sup> And 1 billion people worldwide do not have access to safe drinking water.

<sup>13</sup> According to MDGs progress report 2013, "the mortality rate for children under five dropped by 41 per cent- from 87 deaths per 1,000 live births in 1990 to 51 in 2011. Overall, the number of cholera cases for the decade 2000-2010 increased by 130 %."

<sup>14</sup> UN Water-Statistics<[http://www.unwater.org/statistics\\_san.html](http://www.unwater.org/statistics_san.html)>. accessed on 8/19/2013

Company Limited (Poly-Glu SBC), a small-sized Japanese company. To improve human security in Somalia, IOM purifies the polluted river water using Poly-Glu's water flocculent technology with financial support from GoJ. Innovative technology has made it possible for IOM to provide safe water to over 50,000 IDPs and their affected host communities through 13 water treatment systems, over a period of 14 months.

This collaborative work began as follows<sup>15</sup>. A Japanese officer belonging to IOM Somalia incidentally discovered water purifying technology on TV. Immediately, he contacted Poly-Glu SBC in 2011 to explore a PPP that would lead to the improvement of vulnerable IDPs' human security through the provision of safe and clean water. IOM and Poly-Glu SBC visited the Japanese Embassy in Kenya and explained the possibilities the technology provided. Fortunately, in January, 2012, JICA signed an agreement with IOM to implement a three-month pilot study on water supply, sanitation and hygiene for 5,000 IDPs living on the outskirts of Mogadishu, the capital of Somalia (JICA, 2012). In response to its favorable result, with the Embassy of Japan in Kenya having played a central role, GoJ donated 4 million USD under the supplemental budget to IOM's project in Somalia in March, 2012 (IOM, 2012).

### (3) Key Points: Mechanisms for ensuring programme efficiency and effectiveness

GoJ, IOM and Poly-Glu SBC share mutual interests. Although GoJ is willing to promote human security in Africa, Japanese Embassy staff are however prohibited from visiting in at-risk areas for safety reasons. The constantly changing security situation can serve as an obstacle to implementing a project. For example, the pilot study was the first JICA-supported work in Somalia since 1991 when its assistance was put on a hold due to internal conflicts (JICA, 2012). This indicates that GoJ did not possess sufficient knowledge of Somalia and also lacked an effective social network. In place of GoJ, IOM is able to assume responsibility for implementing projects because its staff have been trained to work in high-risk areas.

Considering the company's incentives, sales of water purifying systems<sup>16</sup> to IOM, and the developing of new markets in Africa were achieved. The IOM officers, who already possessed local

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<sup>15</sup> Base on the online interview with Ms. Mihoko Sakai, the former officer in charge of the economic corporation at the Kenyan Embassy in November 2012 and the interview held in person with Mr. Chiaki Ito, the IOM Somalia's officer in Kasumigaseki in June, 2013.

<sup>16</sup> Powder-typed "Poly-Glu (the name of the product)" is made of a sticky substance obtained from fermented soybeans, so that it is less toxic than other chemicals. The retention period is more than two years longer than other liquid products.(Nippon Poly-Glu Website: [http://www.polyglu.net/polyglu\\_e/aboutus/index.html](http://www.polyglu.net/polyglu_e/aboutus/index.html)) "Based on IOM's quality standards with technical guidance from Japan Nippon Poly-Glu Co., Ltd., among the three tanks, IOM set the first tank to be used to treat the water with Poly-Glu to flocculate the sediments of the water from particle suspension, the second tank for chlorination and the third for the clean and the safe distribution to beneficiaries.(IOM Somalia, IOM provides clean water to more than 31,000 IDPs in Somalia. <<http://kenya.iom.int/news/item/455-increasing-access-to-safe-water-supplies>>accessed on 8/25/2013)"

networks in the IDP camp, accompanied Poly-Glu SBC everywhere securing their safety and raising sanitation awareness. The advocacy activity in the developing countries directly means "marketing" in the business value chain, therefore, it ought to have been Poly-Glu's responsibility. Unusually, in the IDPs camp, it was IOM which handled the role of marketing instead of Poly-Glu SBC<sup>17</sup>. Poly-Glu SBC built their water purifying system close to the IDPs camp, and transferred the skills for maintenance to the local people. IOM had already worked on building trust with the local people, so that IDPs did not express stiff resistance to having new technology brought by foreign strangers. In these aspects, PPP plays an extraordinary role in business risk reduction.

This private water purifying technology also made the public emergency humanitarian assistance more cost-effective. IOM could deliver the purified water to more people in a shorter time than required by conventional means. According to (Ito and Tokuda, 2013, 50), groundwater, which almost all other aid agencies rely on, hard and has high salinity in Somalia. What is worse, groundwater has relatively higher production costs than river water. The local people use groundwater for both human consumption and agricultural purposes, so that its yield is limited. On the other hand, this project uses river water, which is often available in large volumes on a permanent basis.

#### (4) Achievements: Economical, Social, Environmental impact

IOM developed the replicable aid model, which serves as an important development resource for traditional donors. Additionally in 2013, GoJ and the Government of France financially contributed and the beneficiaries will be increased up to about 120,000 persons in Somalia<sup>18</sup>. Moreover, IOM has a mid-term "exit strategy" which targets 300,000 persons in 2014, 50,000 in 2015, 1million in 2016. IOM aims at creating the market for purified water in three years and commercializing it within five years after IOM leaves<sup>19</sup>. The average income of IDPs in Somalia is 0.4 USD per day, so the fee (0.04USD) of water delivered by Poly-Glu's technology will consist 10% of one IDP's earnings<sup>20</sup>. Thus, there will still be an opportunity for commercialization in 2016.

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<sup>17</sup> IOM has trained approximately 700 Somali hygiene promoters who have conducted community social mobilization and hygiene promotion programmes, reaching 82,000 persons.

<sup>18</sup> IOM Kenya, 2012. IOM Somalia Receives Euro 1 Million from France for Stabilization Programme. <<http://kenya.iom.int/news/item/466-iom-somalia-receives-euro-1-million-from-france-for-stabilization-programme>> accessed on 8/17/2013

<sup>19</sup> Refer to (Ito, 2013)

<sup>20</sup> It is said that people living in developing countries spend about 20% of their income on water (Care International Japan), although it is difficult to estimate the amount spent on water because the poorest household typically spends 90% of its income on food including water (WHO, 2011, 70-71).

(a) Economic Impact

In terms of income generation, the construction and maintenance of water systems has provided employment opportunities and contributed to the local economy. According to IOM, some IDPs are interested in generating income from distributing and selling Poly-Glu<sup>21</sup>.

In respect to Poly-Glu SBC's commercial benefit, it is expected that the market for safe water will grow because the government of Somalia recognizes the potential use of Poly-Glu in large-scale water provision and is fully committed to supporting the project (IOM, 2013). In addition to the government, other UN organizations including UNHCR have expressed considerable interest in Poly-Glu and are preparing new proposals for utilizing its water purifying technology<sup>22</sup>. The performance of Poly-Glu has been proven by the public sector, which is a significant advantage over the competitors.

Concerning the allocation of public development resources, attaining access to safe water through Poly-Glu possibly decreases the financial requirement for water. According to Somalia Consolidated Appeal 2013-2015, more than 4 million people in Somalia are in need of access to safe water. Nevertheless, the improving water and sanitation project in 2013 will target less than two million Somalis<sup>23</sup>. The funding requirement of 122 million USD estimates the necessary expense for daily water at 0.17 USD per person. Differed from the traditional means, a water purifying system through Poly-Glu costs approximately 0.04 USD <sup>24</sup>(IOM, 2013, 6). This technology requires only 61 million USD, one half of the budget as of 2013, to cover all the Somalis in need of it<sup>25</sup>.

(b) Social Impact

Communities report that diarrhea among children has been dramatically reduced (Ito and Tokuda, 2013, 47). Besides, easy access to safe and clean water also promotes personal security and provides the opportunities for education and income generation to IDP settlements and host communities. Children and women are saving time which would otherwise be used in fetching water. Injuries associated with fetching water have also been reportedly reduced, including attacks from crocodiles that make their homes in rivers (Ito and Tokuda, 2013, 47).

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<sup>21</sup> See footnote 17.

<sup>22</sup> Based on the interview with Mr. Oda, CEO of Poly-Glu SBC, at Yokohama in June, 2013.

<sup>23</sup> (OCHA, Somalia Consolidated Appeal 2013-2015, 5)

[http://docs.unocha.org/sites/dms/CAP/CAP\\_2013\\_Somalia.pdf](http://docs.unocha.org/sites/dms/CAP/CAP_2013_Somalia.pdf).accessed on 8/19/2013

<sup>24</sup> IOM calculates the fee according to the result of the project as follows. (Project Cost)15 million USD/(beneficiaries) 0.36 million IDPs/(Period)1095days=Daily 0.04USD/person

<sup>25</sup> 0.04USD(daily cost per person)\*365days(a year of 2013)\*4.239million persons in need of water=61,889,400 US

(c) Environmental Impact

As mentioned in (3), in Somalia, water produced by digging a well is unsuitable for drinking. Besides, purifying river water is much safer and has a reduced impact on the environment. Although there are a lot of water purifying technologies on the market,<sup>26</sup> IOM highly evaluates Poly-Glu's environmental-friendly, natural made technology<sup>27</sup>.

**4.3 Case 2: Development assistance by Itochu, UNDP and GoJ in India**

The author conducted the field survey in Shirpur, Maharashtra in India on the 11<sup>th</sup> to the 13<sup>th</sup> of March, 2013. The Pre-Organic Cotton (POC) Programme started with Raj Eco farm, the largest organic agriculture cooperative in India (Phase1) and expanded the targeted site with Deesan Group as its second phase. Most of the quantitative data is based on previous studies which target the first phase. The interview research focused only on the second phase with the local farmers, Itochu and Deesan Group, the local textile enterprise.

(1) Background and Human Security Issues

It is said that a quarter of a million Indian farmers at least have committed suicide since 1995 and indebtedness is a major cause. According to (Elliott, 2013, 212; Fasid, 2010, 8), the majority of suicides are farmers growing Genetically Modified (GM) cotton. The Centre for Human Rights and Global Justice argues that this is a human rights crisis (Elliott, 2013, 212).

By the aspect of environment, cotton occupies a mere five percent of all farmland in India, yet it accounts for more than half of the country's pesticide use, adding a financial burden to farmers and causing serious health concerns including skin and respiratory diseases (UNDP, 2012).

Despite the financial and health benefits, the conversion process to organic cotton remains financially unfeasible for most farmers. The certification of organic products takes three years during which farmers experience a 20 to 30 percent decrease in crop yields. Moreover, they are unable to sell the organically produced crops at organic premium prices due to a lack of certification. In addition to lost revenue, the certification process entails additional fees which are prohibitive for many farmers (UNDP, 2012).

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<sup>26</sup> UNDP executed comparison investigation of water purifying technologies in Cambodia. UNDP, Experiences and lessons learnt from UNDP-private sector partnerships in Japan. <<http://www.undp.org/content/dam/uspc/docs/SPC%20UNDP%20Experience%20with%20the%20Private%20Sector%20in%20Japan.pdf>> accessed on 8/25/2013

<sup>27</sup> As seen in footnote 13, "Poly-Glu is cost-effective, time-saving, simple to use and handle, environmental friendly, and most importantly, less toxic than other chemicals commonly being used for water purification." (IOM Kenya, IOM Somalia Environmental Health Project Initiative <<http://kenya.iom.int/news/item/454-iom-somalia-environmental-health-project-initiatives>> accessed on 8/25/2013)

(2) Project overview and triangular PPP

The Pre-Organic Cotton program was launched in 2007 as a joint project between Itochu Corporation and Kurkku Co., Ltd. The program is designed to help Indian cotton farmers change to the organic production of cotton. This transition will reduce health damage and the environmental burden caused by the large amount of pesticides and chemical fertilizers. The programme helps farmers make this change by providing a guarantee to purchase pre-organic cotton, which is the cotton they produce during the three-year period required for the certificate of completing the transition to organic production. Activities under the programme also include the distribution of free cottonseeds that are not genetically modified, guidance on organic farming, and support for the acquisition of organic farming certificates (Itochu, 2012; Fasid, 2010, 7-23).

Led by private enterprises, this POC programme is to be leveraged by UNDP through the Japanese ODA. The Japan-UNDP Partnership fund financially supports the consulting service delivered by inclusive business experts. UNDP officers provided their knowledge on inclusive business models and development agenda to Itochu and Kurkku. As a result, these two companies gained BCtA<sup>28</sup> membership in 2012 (UNDP, 2012). The interviewee of Itochu stated that, "BCtA obviously enhances internal and external visibility, so that internal employees and external stakeholders such as IFC actively help in expanding the POC programme". The Japanese government's officer mentioned the POC programme in various international conferences such as the side event of the UN General Assembly held in September 2012, which also builds awareness on the market for POC and organic cotton. Itochu and Kurkku use their membership of the BCtA as the driving force for expanding the POC program, helping more farmers to attain higher standards of living while also reducing environmental degradation. Membership of the BCtA is expected to increase international recognition of the program and make pre-organic cotton more likely to be adopted by a wider array of customers, including major retailers and apparel companies in Europe and the United States (Itochu, 2012).

(3) Key Points: Mechanisms for ensuring programme efficiency and effectiveness

Based on the interview with a local farmer, Mr. Ramesh Padel, in the second year of the

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<sup>28</sup> As seen in Chapter 2.2, BCtA (<http://www.businesscalltoaction.org/>) is a global initiative that seeks to challenge companies to develop business models that offer the potential for Development Impact along with commercial success. The initiative is the result of a partnership between the Australian Agency for International Development, the Dutch Ministry of Foreign Affairs, the Swedish International Development Cooperation Agency, the UK Department for International Development, the US Agency for International Development, United Nations Development Programme, the UN Global Compact, the Clinton Global Initiative and the International Business Leaders Forum.

three-year POC programme, the profit stays almost the same from the first year because the expenditure of chemical fertilizer and insecticide are all replaced by local herbs<sup>29</sup> and cow manure at low cost. The local government provides the subsidy for irrigation and Deesan secures the water source and other agricultural inputs including the seeds of the native varieties for all the farmers in the POC programme. Seeds can be subsequently produced by the farmer and germinated in the following year. The local NGO for organic farming examines the soil twice a year and provides them with free technical advice.

In 2007, the first year, only 15 farmers participated in the POC programme in spite of the targeted 100 farmers. The project objective was explained to village leaders who then educated the villagers. As a result, 605 farmers joined the programme and 856 more farmers joined by word of mouth in 2008-2009. During the second phase, 500 households in 2011 and 404 in 2012 joined the POC programme.

#### (4) Achievement: Economical, Social and Environmental impact

According to (Elliott, 2013, 207), "change in the agro-ecosystem may come via the full range of environmental, economic, political and social factors."

##### (a) Economic impact

In the local context, it is generally said that transition to organic farming decreased the yield amount by approximately 30%. However, according to (Fasid, 2010, 12), almost all farmers in the POC programme had better harvests during the first year. The farmers had been overusing chemical fertilizers and insecticides, so that the soil became too poor to grow crops. The illiteracy of the majority of farmers led to misuse of chemical fertilizers. What is worse, counterfeit fertilizers are circulated on the market. In sum, the removal of chemical fertilizers resulted in better yields. As for expenditure, investments were reduced: the seeds, chemical fertilizer, insecticide, labour force and the burden of going to the sub-urban area for purchasing those agricultural inputs. Although no farmer had any financial savings, three out of 11 farmers started new businesses by purchasing cows and buffaloes, five built or re-built their houses and eight were planning to pay back their debts after participating in the POC programme (Fasid, 2010, 15-17).

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<sup>29</sup> This plant is called "Neem." Burned Neem can be utilized as a pesticide, and combined with cow manure compost as fertilizer.

**Table 4.3: Changes in the amount of debt and crops**

		minimum	maximum	average
Cultivable land (acres)		5	12	7.7
Debt (rupees)	Before	20,000	100,000	44,095
	After POC	0	70,000	20,750
Amount of crops (kg/acre)	Before	100	1,200	457.14
	After POC	150	1,000	522.92

Source: Compiled from Fasid, 2010, 12.

During the three-year waiting period, the participating farmers will see a 20 to 30 percent increase in their income, with a projected additional 12 percent increase once their farms gain the official international organic certification (UNDP, 2012). (Nemes, 2009, 9, 15), a research paper of FAO, stated that "organic cotton is much more profitable and various researchers have illustrated examples of cotton yield increases in India. Moreover, according to the FAO report, at least a dozen studies showed that price premiums are not always necessary for organic systems to be more profitable than conventional systems.

(b) Social impact

(Itochu, 2012: Nakata and Yoshida, 2012, 28) point out that more than half of the 60 interviewees reported improvements in their health. Fasid, 2010, 15 also describes that five farmers recovered from running out of breath, seven from itchy-skin, five from vertigo, one from rash, one from fragile health, two from allergy, two from skin disease, three from backache and one from having fever.

As mentioned in (a), it is also expected for farmers to pay back the debts which are the main cause of suicide in India. Besides, one farmer donated his excess funds to children's education (Fasid, 2012, 16). Whereas, farm suicide still regrettably rose by almost 450 in Maharashtra in 2012 to reach 3,786. In spite that Madhya Pradesh<sup>30</sup> reported declines of 154, farm suicide trends in 2012 remain dismal<sup>31</sup>. It is vital for the POC programme to expand its scale in order to achieve a social impact, although this programme at least eliminates the need for chemical fertilizer which has been the main

<sup>30</sup> The second phase of POC programme sites are located in Maharashtra and Madhya Pradesh. There is no data on the farmer suicide figures at POC programme sites.

<sup>31</sup> Sainath, P, Farm suicide trends in 2012 remain dismal. <<http://www.thehindu.com/opinion/columns/sainath/farm-suicide-trends-in-2012-remain-dismal/article4860980.ec>> June 29, 2013, The Hindu

cause of suicide.

(c) Environmental impact

Since the POC programme was locally launched, farmers from 2,346 households have participated in it, and 1,184 of those households have converted to organic farming. Six thousand acres of farmland are now free of chemicals in India. Itochu has set the target for 2015 at 30,000 acres and for 2017 at 60,000 acres, which plan has been officially made a part of BCtA and Itochu's corporate strategy<sup>32</sup>.

## 5. Discussion

(1) Achievements in terms of human security

Case 1 in Somalia involves multidimensional issues related to water, health, personal security (especially for women and children), conflict, mobility, etc. Case1 contributes to MDG1 (poverty reduction) with improved employment opportunities, MDG 4 to 6 (health) with safe water and MDG 2 and 3 (education and gender) by reducing the amount of time women and girls spend fetching water.

Regarding Case 2, private assistance for transition to organic farming directly improved the farmers' health as seen in 4.3(4) (b). The program originally aimed at achieving chemical-free agriculture which burdens the environment less. The chemical-free soil also serves the safe water in the community. In addition, the local organic agricultural advisor<sup>33</sup> encourages the farmers to inter-crop partly because having space in adjoining lands is the key to avoiding friction<sup>34</sup>. Utilizing this space, the farmers also cultivate more agricultural products for personal use. A more self-contained lifestyle and reduced expenses for agricultural inputs allow the farmers to pay their

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<sup>32</sup> Refer to UNDP and Itochu's website.

<<http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2012/08/28/farmers-in-india-to-benefit-from-japanese-organic-cotton-business-partnership.html>> <<http://www.itochu.co.jp/en/csr/activities/poc/>> accessed on 8/18/2013

<sup>33</sup> An agricultural scientist, Dr. Al Partley, works for the local NGO and gives his advice on organic farming to the farmers. The institution is equipped with soil-testing instruments. Deesan, the local company, financially contributes to this NGO. The founder of Deesan is the former president of the local government (See Deesan's Web site <<http://www.deesangroup.com/about-amrisha.asp>> accessed on 8/18/2013). The farmers out of POC programme pay 500 rupees.

<sup>34</sup> Not all the farmers are engaged in the pre-organic cotton program so that abstaining from pesticides also leads to friction in the community. Some conventional farmers blame pesticide-free farming as the cause of agricultural pests. POC farming occupies only two-fifth of the farmer's land. The farmers produce corn, which intentionally gathers pests, their own food and cash crops on more than half of the farm land.

debts, which leads to a reduction<sup>35</sup> in poverty and suicide.

## (2) Benefits of triangular PPP

Regardless of the leading sector, both cases adopted the advantage of the private sector. The key in Case 1 is apparently the water purifying technology. The innovative technology provided safe water to more people in a shorter period than the conventional method. In addition to time and financial efficiency, this triangular PPP offers a chance to make the project sustainable by commercialization.

**Table 5: The advantages of stakeholders in case 1**

	Finance	Project Management Skill	Local information /network	Technology Product	Mobility	Knowledge on BOP business
Donor(GoJ and others)	○	×	○	×	×	△
IOM	×	○	○	×	○	×
Nippon Poly-glu	△	△	×	○	○	○
Local NGO/government	×	○	○	×	○	△

Note: Compiled from (Ito, 2013, 9)

In Case 2, at the early stage, developmental assistance was designed by the private sector alone. The programme worked well and the local participants gradually increased, however, its business model should be transformed in order to achieve the economies of scale based on the ambitious strategic plan (as seen in 4.3(4) (c)). The public sector such as UNDP plays an important role in advocacy i.e. marketing.

## (3) Constraints

When it comes to establishing the triangular PPP model to promote human security, there still remains much work to be done in terms of mechanism, mobility and pro-active policy making. Traditional donors do not have to merely wait for private proposals. Rather, they have the responsibility to lead the discussion on the transforming of consumption and production patterns in order to confront the looming crisis on human security. Regarding the lessons learnt from Case 1, the innovative technology of SME was found by a fortunate coincidence. SMEs usually have no access to IOs and MOFA, so that their technologies are hard to link to global issues. The mechanism

<sup>35</sup> This is not the core business, however, Deesan is running 4 schools and provides the free-of-charge education to the low-caste children of migrant workers.

for combining private technology with public needs, for example, networking, frequent and comprehensive information exchange and the personnel exchange from the public to the private sector, should be considered in cooperation among MOFA, METI, JICA, JETRO and IOs.

On the other hand, the LEs confront the internal issue. It is quite difficult for a low-margin business at high risk to win the understanding of top management<sup>36</sup>. In case of the POC programme, BCtA and GoJ added luster approximately 4 years after its launching, which resulted in internal and external understanding. In this regard, however, this lag time limits new participants<sup>37</sup>.

In terms of sustainability, which is the significant feature of the market-based approach, inclusive business has unfinished work. As for case 2, once the farms obtain the organic certification through the POC programme, they have to find where to deliver their organic cotton at competitive prices<sup>38</sup>. Establishing the organic cotton market is an urgent issue for the public sector because of its huge impact<sup>39</sup> on human security.

## 6. Conclusion

According to the document investigation, it should be safe to conclude as follows;

- The proliferation of human security as the basic concept of post-2015 development agenda requires translation into concrete action by the various stakeholders (Chapter 1).
- The public and the private sector put more emphasis on shared mutual interest and on considering its pressures and incentives (Chapter 2.1(1) and (2)).
- Public-Private Partnership has a variety of definitions, and there is no complete model. Even so, it is understood that designing the appropriate scheme for sharing risks and rewards raises efficiency (Chapter 3.1 and 3.2).

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<sup>36</sup> Unlisted SMEs, which presidents are the owners of companies, are easier to work on the mission-oriented project regardless of profitability.

<sup>37</sup> The board member of Kansai Association of Corporate Executives claims that

"failure to involve internal stakeholders including the top management and gain a clear consensus, makes success difficult to achieve. BoP business should be worked on from a mid to long term perspective because it cannot anticipate short-term profits, which is a huge obstacle to small and medium sized companies." (Kuroda, 2013, 17)

<sup>38</sup> During three years of the POC programme, Itochu guarantees buying all the pre-organic cotton.

<sup>39</sup> "An estimated 2.5 billion people in developing regions depend (to varying degrees) on agriculture within their overall livelihoods - as small holder producers and as wage labourers, migrant workers, herders, fishers and artisans"(Elliott, 2013, 190). "One of the biggest potentials to further improve the profitability of organic farms in developing countries lies in establishing organic markets " (Nemes, 2009, 28).

The lessons-learnt from the two cases in 4.2 and 4.3 are:

- For-profit companies contribute to promoting human security both in the areas of emergency humanitarian assistance and developmental assistance.
- Combining public resources with enterprise resources achieves cost-effectiveness and sustainable community resilience.
- International organizations (IOs) and the Government of Japan (GoJ) also gain benefits from triangular PPP: accumulating know-how and accelerating human security in unreached areas.
- The public resources such as financial and human resources play a role in mitigating business risks.

Although sharing risks and rewards with IOs and GoJ makes it possible for the private sector to contribute to achieving human security, the small and medium sized enterprises (SMEs) and the large enterprises (LEs) face each difficulty. SMEs require the mechanism to exchange information with the public sector and short-term/technology-oriented commitment. LEs expect public endorsement and promotion in implementing long-term projects at local level. Even though the traditional donors have less presence than ever, they have to focus on the extreme poverty and enlarge the role of the private sector in development. More concrete actions in form of triangular PPP are required to gain a public consensus on human security as the practical and basic concept of Post-2015 development agenda.

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## **Integrated Agriculture from the Perspective of the Creation of Employment in the Aging Society of Rural Northeast Thailand**

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### **Abstract**

This paper presents a micro-level sociological examination of cases of farmers who try adopting sustainable farming methods for their subsistence in Northeast Thailand. This research attempts to clarify the local practices, which promote sustainable agriculture development and empower small-scale farmers in choosing and designing life strategies for themselves.

In Thailand, a sustainable agriculture policy was adopted in the 8th National Economic and Social Development Plan. The government promoted sustainable agriculture throughout its 9th, 10th, and 11th plans. Integrated agriculture is the most prevalent farming among different kinds of sustainable agriculture used by Thai farmers according to the report from the National Economic and Social Development Board.

Since 2002, Thai society has come into the aging society. It is easier to go to cities or go abroad as migrants while young. As they get old, it becomes difficult to be migrants and attempt to find an alternative way of life in villages. Then, this paper focuses on human security of small-scale farmers who have the retirement intentions of migrants and return to villages. In regard to this issue, integrated farming can be one of the available choices for farmers to stay in villages all year round because a feature of integrated farming is growing diverse crops and livestock combined and the provision of varied farm work throughout the year. This paper indicates that integrated farming is thus related to the possibility of applying a sustainable agriculture policy for creating as well as increasing the opportunities of employment in rural areas.

### **Keywords:**

Sustainable Agriculture, Integrated Farming, Northeast Thailand, Migrants, Aging Society

## **1. INTRODUCTION**

This paper focuses on human security issues of small-scale farmers who retired from work as migrants and return to their home village. Working as the migrants is a part of life for villagers in Northeast Thailand because there are not enough opportunities of work in the village in the agricultural off-season. It is easier to be migrants when they are young. However, as villagers get old, it becomes difficult in their physical condition to work as migrants and attempt to find an alternative way of life in the village. As a progressive aging society, it would become common issue of villages in the northeast region which provides the greatest migrants in Thailand. How can

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villagers earn a living without enough works during the agricultural off-season in the village? From this standpoint, this paper examines that integrated farming can be one of the available choices for small-scale farmers to stay in the villages all year round because the main feature of integrated farming is growing diverse crops and livestock combined and the provision of enough varied farm work all the year. The conventional diffusion studies of sustainable agriculture development held discussions from the perspective of issues of environment and income generation, and they overlooked the perspective of the employment policy in rural areas. However, it is worth examining integrated farming as the solution of employment issue in order to seek the way of alternative life for the villagers who retired from migrants. In the cases presented in this paper show the common problem consciousness and practices of villagers for this issue. This paper indicates that integrated farming promoted by the government of Thailand as a sustainable agriculture development may increase the opportunities of employment during the agricultural off-season in rural areas.

## **2. HUMAN INSECURITY REGARDING AFTER THE LIFE OF MIGRATIONS**

### **2.1 The Northeast Region Where Scaled the Greatest Migration in Thailand**

As the background of sending migrant workers, the northeast region has some adverse conditions for farming in Thailand. The amount of rainfall has been unstable, and even in the rainy season the rainfall is less. In this region, irrigation is carried out in a special sphere. Therefore, unlike other areas such as the central and northern regions, most farmers in the northeast region cannot reap the benefits of agricultural modernization because of the difficulties they face concerning the water supply. The land in the northeast region has a sandy soil base, with salt embedded in the lower strata of the ground, which often causes salt damage to crops (Oka and Ando 1997: 55). The yield from rain-fed rice farming under the combined adverse conditions of poor soil and erratic rainfall is low.

The cost-push inflation, which includes the cost of chemical fertilizers having soared in 1994, indirectly influenced the rise of urban wages, but the rural wages did not arise because of the low price of agricultural products. Thus, the gap in wages between the urban and rural areas expanded, and between 1989 and 1997, the migration of labour from rural to urban areas increased rapidly (Pasuk and Baker 2002: 122-123). The migration studies explained that workers expect the higher wages and migrate from sending areas to receiving areas such as from rural to urban areas. (Harris and Todaro, 1970; Stiglitz 1974). Therefore, many people from the northeast region seek

higher-wage works outside the area, particularly in Bangkok and foreign countries.

The migration studies have indicated that there is the large informal service sector under the urban construction and industrialization in the receiving areas (Todaro and Smith, 2006). Most migrants engage in works in the informal sector such as construction workers and taxi drivers. According to the Informal Labour Survey (NSO 2007a: 94), 62% of the labour force are in the informal sector and 38% are in the formal sector in Thailand. The workers of informal sector in urban areas often expose themselves to kinds of violence and pollution in their poor working and living conditions. According to the Migration Survey (NSO 2007a: 48), there were 715,041 migrants from the northeast region and the number of migrants was the highest<sup>2</sup> among the whole kingdom in 2006. As the background of the number of migrants, the unemployment rate in the northeast region was the highest<sup>3</sup> with 1.1% among the whole kingdom in January 2013 according to the labor force survey (NSO 2013). Thus, the northeast region scaled the greatest migration in the country. Because of these above conditions, a certain number of small-scale farmers in the northeast region engage in farming in the rainy season and work as day labourers in the agricultural off-season.

## 2.2 In Aging Society

According to the U.S. Census Bureau (2012), Thai society has come into the aging society since 2002, with its aged community comprising 7% of the nation's population. The proportion of Thailand's over-65 population was 6.8%, 7.1%, 8.7%, and 9.8% in 2001, 2002, 2010, and 2013 respectively. If the same statistics hold, it is anticipated that Thailand will reach a stage where the share of citizens over 65 years will be above 14% of the whole population in 2024. According to NSO (2010), the proportion of over-65 population was 39.6% in urban areas and 60.4% in rural areas in 2010. It meant that rural areas were more serious for the acceleration of demographic aging. Thus, migrants need to more concern about the life after retiring as migrants than before. Then, what kind of choices can villagers have in the agricultural-off season in the village? This is the central question addressed in this study.

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<sup>2</sup> There were 715,041 migrants from the northeast region, 409,851 migrants from the north region, 209,034 migrants from the southern region, 650,397 migrants from the central region, and 93,241 migrants from Bangkok in 2006 (NSO 2007a: 48).

<sup>3</sup> In 2013, it was found that the unemployment rate in the Northeast and South were the highest with 1.1%, followed by those in the Central (0.7%) and the North (0.6%). (NSO 2013)

### **2.3 Human Insecurity**

The Commission on Human Security 2003 defined human security as to protect the vital core of all human lives in ways that enhance human freedoms and human fulfilment. According to the United Nations Trust Fund for Human Security (UNTFHS), the application of human security derives much of its strength from a dual policy framework based on the mutually reinforcing pillars of protection and empowerment. This paper focuses on human insecurity of small-scale farmers who have the retirement intentions of migrants even though they cannot earn living wage in their village.

## **3. SUSTAINABLE AGRICULTURE POLICY IN THAILAND**

In order to consider the choices of villagers who retired as migrants and hoped to stay in the village, this part explain the process of diffusion of sustainable agriculture policy in Thailand as background for the discussion of relationship between integrated farming and employment issues.

### **3.1 Importance of Agriculture in Northeast Thailand as a Significant Social Sector**

Agriculture is the main subsistence occupation of the majority of the population, 39.6% of total employment, in Thailand. Over 5.79 million households, which formed 33.5% of the nation's households, occupied over 111.95 million Rai<sup>4</sup>, which comprised 34.9% of the national land area in 2002. The agriculture sector contributed over 330,383 million Baht which accounted for 10.2% of GDP in 2002 (NESDB 2004: 6). In 2005, the main agricultural products in Northeast Thailand were rice, cassava, maize, pineapple, soybean, mung bean, sorghum, groundnut, and kenaf (NSO 2007a: 269). In Khon Kaen province in Northeast Thailand, the research site of this paper, 74.4% of the total holdings employed agricultural workers in 2003 (NSO 2003b: 41). The agribusiness sector is a significant economic sector and remains the primary source of livelihood for rural masses.

### **3.2 Impacts and Consequences of Past Agricultural Developments**

Conventional diffusion studies have already dealt positive effects and possible threats about the 'Green Revolution' in Southeast Asia. Agricultural modernization as typified by the 'Green Revolution' has been called an example of technological progress that was utilized in an attempt to

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<sup>4</sup> 'Rai' and 'Ngan' are the measurement units of lands in Thailand. One Rai is equivalent to 0.16 hectares. One ngan is equivalent to 0.04 hectares.

escape the ‘Ricardian trap’<sup>5</sup> (Hayami 2000: 85). In order to improve the agricultural yield with the seeds of High Yielding Varieties (HYV) developed by the Green Revolution, farmers need enough fertilizers and also ways to control the water level. Thus, modern inputs such as fertilizers and irrigation systems are indispensable for HYV seeds. The ‘Green Revolution’ created a change from a livelihood system involving manual labor, draft cattle and rain-fed cultivation to one involving the use of chemical fertilizers, machinery, and irrigation systems (Egaitso 2003: 163). Modernization of agriculture, however, led to an increase in the agricultural revenue, and this contributed to the economic growth of the countries that practiced it.

On the other hand, it also caused problems at the local and district levels, such as economic disparities, environmental problems, and large debts among farmers. Until the 7th National Economic and Social Development Plan (1992-1996), income and productivity were the main goals, and results of the developmental measures to achieve these to the natural surroundings were not taken into account. The intensive chemical use involved in commercial farming harmed not only the nature and environmental resources but also farmers’ health and quality of life. The research report of the National Economic and Social Development Board (NESDB 2004: 9–14), identified problems about chemicals, soil erosion, health conditions, and low life quality<sup>6</sup>. The government of Thailand came to have such recognition for modern agriculture as these issues emerged with reports from scholars and researchers.

### **3.3 Necessity for Change: The Development of Sustainable Agriculture**

These consequences of past agricultural practices in modernization led to sustainable agricultural policy in the 8th plan (1997-2001). The government adopted the concept of ‘Human Development’ from the United Nations during the 8th plan. This was summed up by the statement that social problems highlighted environmental problems and unequal distribution, even though economic growth had been accomplished. According to NESDB, the goal of ‘sustainable

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<sup>5</sup> The limited land resources restrict agricultural production, and this in turn stunts economic growth, in a mechanism of stagnation. This refers to the situation in which the limitations of land resources cause a region or a community to become stagnant, or caught in a trap, thus blocking sustainable growth (Hayami 2000: 85).

<sup>6</sup> NESDB (2004, 9-14) identified following problems: (1) Chemicals: In 2003, Thailand imported 9,790 tons of pesticides and 31,879 tons of weed killing chemicals, with a total value of 11,341 million baht. (2) Soil erosion: Surface soil, which contains nutrients, was lost to the extent of over 41.95% of the national arable land. The damaged area increased from 107.7 million Rai in 1981 to 134.5 million Rai in 1995. The soil damage was estimated to be 3,774 million baht by the Land Development Department. (3) Health conditions: There are short- and long-term effects on the producers’ and consumers’ health conditions. From 1989 to 1998, there were 38,223 reported illnesses from pesticides that caused 338 casualties. (4) Low life quality: Purchase and use of chemicals raised production costs to a higher level. Instability of market prices and weather factors also posed higher risks to chemical-based production. Farmers suffered net losses from their production, due mainly to increasing input costs and falling costs for farm commodities.

agriculture' was to create an agricultural system that took the ecological system into account while preserving and recovering both the farms and natural resources, and becoming less dependent on outside resources.

In Thailand, there are five primary types of sustainable agriculture which are set by NESDB. These are integrated farming, organic farming, natural farming, agro-forestry, and "New Theory" farming<sup>7</sup>. The 8th plan adopted sustainable agricultural policy as a significant approach under the regional and rural capacity building and development strategy.

In the economic crisis of 1997, His Majesty the King advised the Thai people to change their economic philosophy to cope with the present economic adversity and to withstand future economic insecurity. The King's ideas have come to be known as the Philosophy of the "Sufficiency Economy" and have been the guiding principle of the 9th<sup>8</sup> (2002–2006), 10th (2007–2011), and 11th plan of NESDB (2012–2016). At present, the government of Thailand promotes integrated agriculture as sustainable agriculture, as can be seen in the following quotation from the 11<sup>th</sup> plan (NESDB 2012: 68): "Promote sustainable agriculture following the Philosophy. Examples are organic farming, integrated farming, and new theory agriculture. This is particularly useful for small-scale farmers so they may establish food security and conserve biodiversity. "

### **3.4 Integrated Farming: The Most Prevalent Method of Sustainable Agriculture in Thailand**

How many farmers have actually introduced sustainable agriculture? As we have seen, the government of Thailand has tried to promote the five types of sustainable agriculture and the 8th plan also proposed to revive the rural community using sustainable agriculture, targeting 25 million Rai<sup>9</sup> for sustainable agriculture, or 20% of the national arable land (NESDB 1997). However, in reality, the program could not reach this goal by 1999. According to the NESDB report (NESDB

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<sup>7</sup> Each is explained below according to the definitions by NESDB (NESDB 2004: 10–14). In "organic farming", farmers do not use chemical fertilizers and use organic fertilizers to nurture the soil, and they use natural pesticides such as strong smelling plants to control pests. In "integrated farming", there are more than two kinds of activities in the farmland, such as various crops and livestock. "Natural farming" has four criteria, which are: no soil adjustment, no chemicals, no pesticides, and no weed removal. "Agro-forestry" means using the forested land in a sustainable way to farm as well as cultivate forests. "New Theory" farming was proposed by His Majesty the King of Thailand on 25 January, 1993. This concept was about land use and the management of crop production for sustainable development, for small-scale farmers whose average size of the farms is 10–15 Rai. On this supposition, the farmland is to be divided into four parts with a ratio of 30-30-30-10, for fish ponds, rice plants, agronomic crops, and the family's house, respectively (Subhadrabandhu 1998, pp. 1–6).

<sup>8</sup> In the 9th plan, there were new adjustments to the policy to make the promotional campaign more suitable and efficient in the development process. The new plans aim to expand sustainable agricultural development along with building the capacity of farmers through increasing their income, employment opportunities, and quality of life. This goal was supposed to provide an opportunity for their stakeholders be more prepared to take on sustainable agriculture to construct their learning processes and development network (NESDB 2002).

<sup>9</sup> 'Rai' and 'Ngan' are the measurement units of lands in Thailand. One Rai is equivalent to 0.16 hectares. One ngan is equivalent to 0.04 hectares

2004: 15-18), government projects in sustainable agriculture covered only 3.8 million Rai<sup>10</sup> which means nearly 3% of the national arable land in 1999, and integrated farming made up about 86.8% of this 3.8 million Rai. Based on this results, integrated farming was found to be the most prevalent method of farming among the different kinds of sustainable agriculture practiced by Thai farmers.

Why do so many farmers prefer ‘integrated farming’? Farmers diversify the use of their land from mono-cropping of rice to diversified agricultural systems. The main characteristic of integrated farming method is growing diverse crops and livestock combined with environmental stability and the provision of enough varied farm work throughout the year. Farmers can be self-sufficient by growing their own food such as vegetables, fruits and livestock as well as raising fish. The surplus can be traded in the grocery store for an extra income. This farming system is regarded as the most appropriate land use strategy for small-scale farmers in the north and northeast regions of Thailand as NESDB mentioned (NESDB 2012: 68). Integrated farming enables stable production with reduced chemical pesticides and chemical fertilizers because of its mixture form of cultivation of crops and livestock raising. Its emphasis is primarily on food security and the efficient utilization of farm resources. Especially for small-scale farmers, it is a farming system that gives priority to food security for the farm household and recognizes that self-sufficiency in staple foods is a basic need.

### **3.5 Who does Introduce Integrated Farming?**

There are two kinds of producers who introduce integrated farming. One kind produces for “niche markets”, which FAO calls (FAO 2004: 21) as “value-added” products, by obtaining a certification such as "organic", "fair-trade", or "environmentally friendly". These products command a premium price and bring higher returns to farmers. The other kind produces for the subsistence economy, by reducing expensive chemical inputs and keeping a portion of their subsistence crops for the household. The former group tends to consist of the richer farmers who can afford to take financial risks. The private sector in agribusiness tends to spread out into the foreign market with organic products by contracting with these richer farmers with more land. The latter group consists of small-scale farmers. They cannot afford to continue to increase their debts. Therefore, they reduce the amount of expensive chemical fertilizers and other agrochemicals used in order to keep expenditures down. They need to emphasize on producing their own food for

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<sup>10</sup> The breakdown of this 3.8 million Rai was 3.3 million Rai covered by the integrated farming, 0.22 million Rai covered by “New Theory” farming, and 0.32 million Rai covered by agro-forestry. Organic agriculture and natural farming were not well known in the report (NESDB 2004: 15-18).

household food security, using their smaller resources in the farmland, garden, and forests.

### **3.6 Obstacles to Diffusion**

The research report from NESDB pointed out three obstacles to diffusions of sustainable agriculture (NESDB 2004: 16). In the beginning period, there was a lack of know-how, readiness, and government administrations capacity. Farmers were not ready in terms of physical, economic, and social factors<sup>11</sup>. These factors also hindered the accessibility of government campaigns to the local farmers. Therefore, there is a need how people can construct a more supportive environment such as supports from community groups and NGOs that would enable them to overcome such difficulties.

### **3.7 Deficiencies in the Past Literature**

Previous studies on the diffusion of sustainable agriculture<sup>7</sup> in Thailand tended to overlook the perspective of the creation of employment opportunities within rural areas. These studies tend to hold discussions from the perspective of the 'environmental issue' and the 'income generation' as follows. (1) The former mentioned that the environmental deterioration, for example degraded soil and water contamination, was caused by agricultural modernization and it affected agricultural productivity and led to health problems through chemical-based inputs (cf. NESDB 2004). (2) The latter pointed out the need of poverty reduction in rural areas by income generation. These studies recommended the promotion of "value-added" products by obtaining an organic certification which brought higher returns to farmers (cf. FAO 2004). (3) There were studies which mentioned both environmental issue and income generation. For instance, Jisanguan indicated that sustainable agriculture was not only financially feasible; but also enhanced the environmental quality, and benefitted the farmers in particular and Thai society in general (Jisanguan 2001). In short, these diffusion-related studies tended to focus on issues of environment and income generation, not on employment issues.

Some of the scholarly studies suggested the possibility of employment opportunities, but a micro-level sociological examination of cases is few. As a reference, Akira Suehiro offered that nurturing farmers from university graduates could be one of the employment policies in Thailand

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<sup>11</sup> Physical factors such as land rights, confidence to make new adjustments, lack of water resources, and lack of labor. Economic factors were lack of funding to make adjustments such as digging ponds, clearing away the old soil, and purchasing new tools. Outstanding debt also caused lack of interest. Social factors were no motivation to try sustainable farming, lack of opportunity to learn and apply knowledge, and lack of networks and assistance (NESDB 2004, 16).

because knowledge related to information technology, chemistry, pedology, management and accounting were indispensable to produce safe products and maintain a stable management (Suehiro 2009: 132). These policy recommendations need an actual survey as to how sustainable agriculture can contribute to employment policies. Furthermore, it is worth concerning the alternative way of life after having an intention of retirement of migrants in terms of human security. This study indicates the possibility of applying an integrated farming which promoted by the government for the employment policy in rural areas.

#### **4. METHODOLOGY**

The following cases are based on the data which I have gathered during ten periods of field research in NP village in Khon Kaen province in Northeast Thailand from 2004 to 2010. One round took me about one month. The reasons why I chose NP village as my research site were that there were farmers who had the experience of migrants and practiced the alternative farming method on their lands. I used semi-structured, in-depth interviews as a way of grasping the livelihood of the farmers. I asked mainly about their work experiences, farm management and their social relationship in the village. Each interview took approximately two hours per household. I also conducted a tracing interview for some villagers when needed. Main targets were small-scale farmers, and I also interviewed key informants such as the headman of the village and leaders of community groups. I collected data from 48 households<sup>12</sup> in NP village in total<sup>13</sup>. In order to back up the analyses of these subjects, I also collected secondary statistical data and official statements as well.

#### **5. CASE ANALYSIS: FROM THE LOCAL PERSPECTIVE**

##### **5.1 Basic Characteristics of Khon Kaen Province**

Presently, Khon Kaen province is a regional center for education, finance, and transport in Northeast Thailand. Khon Kaen is situated about 440 km northeast of Bangkok. According to the Household Socio-Economic Survey 2007 (NSO 2007b), the average monthly income per household was 12,995 baht in the northeast region and 35,007 baht in Bangkok. It meant that the income

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<sup>12</sup> As a reference, the population in NP village was 625 people in 128 households in 2008 according to the headman of the village.

<sup>13</sup> I collected these data with my co-researcher, Masatoshi Uehara, and we share the data for our study respectively.

differential between Bangkok and the northeast region in terms of household income was 3 times. Furthermore, villagers in the research site of NP village have a much lower income than people in Bangkok and it is one of the background of the high rate of migrants in NP village (see Table 1). Khon Kaen is one of the provider of domestic and overseas migrants. Many actors, such as governmental organizations and Thai and foreign NGOs, came to implement projects on sustainable agriculture development in this region. Thus, this area is considered to be suitable to analyze the farmer empowerment. Through the cases, this paper demonstrates how the grass root activities of the community groups were then able to promote integrated agriculture on their own with their problem consciousness which were based on the regional context.

## **5.2 Features of NP Village as a Research Site**

This paper focuses on ‘NP’ village in Phon district of Khon Kaen province in Northeast Thailand as a case. NP village is located approximately 70 km south of Khon Kaen city. Rainfall here is unpredictable and extremely little even in the rainy season. This region had often suffered from drought. There is no irrigation system in NP village, because the soil has a high saline content and it is difficult to irrigate this field. Thus, they cannot take the form of double-cropping without enough water. Because the groundwater has a high salt content and villagers cannot drink it, they use it for showering and washing in the household. They depend on rainwater for farming and drinking water. When the farmers in NP village face a drought, they sigh over the dwindling amount of water and say, ‘The only thing we can do is simply to wait for the rain’.

Further, NP village locates far from large grocery stores in the city. There is quite a distance even in the local grocery stores, and then the villagers need a car or a motorbike if they want to operate and sell their merchandise. When they hold a large volume of products to sell, the villagers ask their friends who own a truck to transport the products. But then, when they have only a small amount of products, the villagers choose to consume the product themselves first, and then sell to the members of the community group and to the village marketplace. When buying or selling at these local levels, they consequently tend to choose organic products rather than products which are produced using chemical inputs. This is because they know each other’s farming methods and also how safe their products are.

As one livelihood strategy, NP villagers go to cities or foreign countries as migrants in order to earn for their family and to pay back their debts. There are two cases of migrants from this region. One is the year-round migrants and the other is the migrants who travel during the agricultural off-season. The head of the NP village mentioned that 210 out of 625 people<sup>12</sup> in NP

village had gone to cities or foreign countries as the year-round migrants in 2008 (see Table 2). The number of migrants categorized in the latter off-season category, however, was even higher.

**Table 1: Income Distribution in NP village (2004)**

Annual Household Income (Baht)	1,000 -5000	5,001 -10,000	10,001 -20,000	20,001 -30,000	30,001 -50,000	Total
Number of Household	20	24	25	25	19	113

Source: The agricultural office of the Khon Kaen province 2004

Table 2: Demography of NP Village (2008)

Number of Household	Population			Twenty years of age and older	Year-round Migrants	Total Area of NP village
	Male	Female	Total			
128	318	327	625	472	210	448 hectare

Source: Based on the village record of the head of NP village in the field research, 2008

### 5.3 Features of the Integrated Farming Group in NP village and the ‘One Rai Project’

An important feature of NP village is that the community group actively promotes integrated agriculture at the grassroots level. The integrated farming group was able to involve half of the villagers, 56 out of 128 households<sup>12</sup>, in NP village in 2008. This group was founded in 1994 based solely on the problem consciousness of nine villagers in NP village at first. Through its activities, the group developed a unique network among 12 community group leaders in five provinces in the northeast region; three are in Khon Kaen province, four in Buriram province, two in the Surin province, and one in the Amnat Charoen province. They share their farming experience, knowledge, and techniques at their monthly meeting. The group is well-organized in solidarity.

The leader of the integrated farming group in NP village explained the meaning of their group’s name in Thai, ‘*Wichchalay* (various kinds of knowledge) *Phumipayya* (wisdom) *Thai Esaan* (Northeast Thailand) *Khun Thin* (return back home)’. Especially, he emphasized the meaning of “Khun Thin (return back home)” of this name. He said, “I wish the villagers could live in this village with enough safe food and farming jobs, and migrant family members could come back to this village. That is why there is the idiom of ‘return back home’ in the name of our group”. The group name symbolizes the hope of NP villagers.

The group mainly has four activities, mostly targeted to the capacity of small-scale farmers. First, the group promotes integrated farming, especially the ‘One Rai Project’. This farming method requires only one Rai of land, which is equivalent to 0.16 hectares. The ‘One Rai Project’ makes a pond in the center of farmland of only one Rai. Then, various kinds of vegetables and fruits trees are planted around the pond which contains fish. As the group explains, “Farming in a ‘One Rai

Project' can sustain four members of a family all year round with various vegetables, fruits, herbs, and fish. However, one Rai is not large enough to produce rice, so farmers should cultivate rice aside from the one Rai project". There are quite a number of small ponds now in NP village. Most of the small ponds in the farmlands are artificially dug in order to stock rainwater. It is easier for small-scale farmers to design the 'One Rai Project' to fit the circumstances of their limited quantity of farmland.

Second, group members are to share their farming experiences and knowledge among their members using their network. In this way, the farmers can try out integrated farming but with low risk to themselves. The group members come up with a common problem of consciousness on chemical-based farming when sharing agricultural knowledge in their network. Their concerns are many and varied: the toxicity in the farmland and food, the resulting health problems, and the difficulty of functioning on a chronic shortage of water. This group of farmers can thus share their experiential knowledge of both their successes and failures in agriculture. Therefore, other farmers who have not attempted integrated farming can also estimate the potential risks and merits of it beforehand.

Third, the group enables the members to keep up their system of mutual aid in agriculture, including product surplus exchange and labour exchange. This group also obtains a group-rate discount on organic fertilizers from factories. In this village, organic fertilizers are in short supply because of the heavy demand from so many villagers due to the actions of this group.

Lastly, the group acts as a sort of revolving fund. The group collects a membership fee annually. If a member desires to borrow some of the money for agricultural investments such as digging a pond in order to stock rain water, the group members will have a meeting to determine whether the group should lend money to the member. These activities are directly related to the needs of farmers' lives and, importantly, are both initiated and overseen by the farmers themselves.

NP village thus has a history in the past decade of a community group which promotes integrated farming at the grass root level, mainly due to harsh environmental conditions, especially the lack of adequate rainfall and damage due to the high saline content of the soil. The farmers here have thus always been concerned about environmental issues which directly relate to the amount of agricultural products.

#### **5.4 The Livelihood Strategy of "Without Agricultural Off-season"**

##### *Process of introducing integrated farming*

This case is a good example of how a farmer seeks to introduce integrated farming as a 'One

Rai Project' and the farmer can operate even during the agricultural off-season in NP village. I interviewed Mr. A three times on 10th March 2004, 23rd August 2009 and 18th July 2010 in NP village. The informant number in my field research of Mr. A is 'NP-17' and I guard villagers' privacy under anonymity.

Mr. A lived with his three family members: his wife, son and daughter. He owned a land of 7 Rai (about 1 hectare) and he was a member of the Integrated Farming Group in NP village. When he was young, he had a dream to work in Bangkok. After graduating school, he went to Bangkok and worked in a factory for a year. He could not get used to the air pollution from automobile fumes and the traffic jams in Bangkok. From Bangkok, he went to Taiwan as a migrant worker for 4 years. Then, he came back to NP village and began rice farming.

Mr. A had used chemical fertilizers since 1977 because his neighbours used them as well. One day, his father became sick and went to a hospital. Based on the check-up results, the doctor told him not to use too many chemicals. As a result, the father of Mr. A began to reduce his chemical inputs. In 1992, he also tried to introduce the method of integrated farming in order to raise safe farm products in his limited farmland. Simultaneously, some villagers held a meeting<sup>14</sup> about the integrated farming in 1992. Mr. A heard this story from his father and Mr. A also began to reduce the use of chemical fertilizers and instead use organic fertilizers in 1995.

Since 1998, Mr. A has not used chemical fertilizers in his farmland at all because he favoured the idea of the 'sufficiency economy' of the King. In 1999, Mr. A joined the integrated farming group in NP village in order to know the farming methods of integrated farming. The year in which he stopped using chemical fertilizers, his yield drastically decreased from 800 kg of unmilled rice per Rai to 500 kg per Rai. Villagers who didn't belong to the group saw his miserable state of farmland and laughed at him. After two years, the yield increased to 700 kg of unmilled rice per Rai through the use of organic fertilizers and the improved good condition of the soil. He used two types of organic fertilizers, one which was factory-made and the other made by himself which cost nothing. He mixed yeast, water, and fermented food scraps, from rice, fruits, and vegetables, in a pot and left it for 15 days. He knew this method from the shared experience of the others in the network of integrated farming group. When he had used chemical fertilizers before, the cost was around 1,000 Baht per Rai per year. At once, his cost of organic fertilizers was about 300 Baht per Rai per year at that time. His yield amount has slightly decreased, but his expenditure for chemical

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<sup>14</sup> The integrated farming group of NP village was founded in 1994 with nine farmers. In 1992, the villager, who eventually became the leader of the integrated farming group, held a meeting with some villagers who had an interest in the methods of integrated farming in advance of organizing the group. (Based on the interview with NP-2 on 5<sup>th</sup> March 2004, NP-17 and NP-47 on 18<sup>th</sup> July 2010.)

inputs has also decreased. The farmer said he could now strike a balance between income and expenditure in his household economy because of lower investment costs.

Mr. A has seriously begun the integrated farming in 2002. He improved his agricultural knowledge, learning and sharing experiences from the well-trained farmers who were in the same network of the group. In 2006, the integrated farming group applied to the Thai Health Promotion Foundation for funds for promoting integrated farming as a 3-year project. Mr. A and 22 villagers introduced the 'One Rai Project' to their farmland and they submitted regular reports on the role of land and four markets to the Thai Health Promotion Foundation. The four markets are the evening market in NP village on Monday and Friday, the trade exchange among the group members, the organic food market in front of the Ubonrat hospital, and the well-known organic food market in front of the district government building of Phon district. Agricultural experts frequently come to this 4th market of Phon district in order to find out whether the products have chemical components. This is helpful to organic farmers who wish to sell as they can then disseminate information about the commercial viability of organic products. The farmers hope that such markets for organic products will multiply in the near future.

#### *Before and After*

When Mr. A began farming, he cultivated only rice in his farmland of 7 Rai. His income from agriculture consisted of only rice which was worth about 55,000 baht per year. After introducing the integrated farming to his farmland, he has five Rai of rice, one Rai and one ngan of the fishpond, and three ngan of various trees. one ngan equals 0.04 hectares. He uses five Rai for rice in the rainy season and for corn and beans in the dry season. Around the fish pond, various vegetables and fruit trees are grown. His income from farming is based on rice, vegetables, fruits, and livestock, which bring in about 75,000 Baht per year. He also worked with the group as a secretary of the group leader as a part-time job. The wage is about 10,000 Baht per year. His income increased after he introduced integrated farming.

Prior to integrated farming, his year-round schedule was growing vegetables from January to February and rice from June to December. There was nothing to do from March to May. Many villagers went to the city as migrant workers in the agricultural off-season, but Mr. A did not like working as a migrant anymore. After introducing integrated farming, he was able to deliver several kinds of farm work in his farmland all year round. He sows rice seeds in July and harvests between November and December. He grows corn and beans from January to May and grows pumpkins from June to August. He grows various vegetables in both November and December. He grows

fruit trees such as banana, mango, and custard-apple. He also has a part-time job as a secretary to the leader of the integrated farming group. He said, “I was not happy when I worked in Bangkok as a migrant worker. Now, I have work everyday all year round in this village. I’m satisfied to stay home with my family.”

### **5.5 Hope to Stay in the Village as Getting Older**

The second case of NP villagers indicates that integrated farming can create agricultural work throughout the year and can be one of the choices for villagers who hope to remain in the rural areas as they become older. I interviewed Mrs. B on 18th July 2010 and her informant number of my research was ‘NP-47’. She owned a land of 25 Rai in NP village. She was 47 years old and lived with her four family members: her husband, grandmother, and two sons. She was engaged in farming and housework after marriage. She also took care of her grandmother who was 95 years old in 2010.

In the past, her family planted only rice in the farmland. As explained in the case of Mr. A, some villagers set up meetings<sup>14</sup> about integrated farming in NP village in 1992. This opportunity led Mrs. B and her husband to begin introducing integrated farming although they did not join the integrated farming group at that time. They used two Rai of their land for integrated farming and the remaining 23 Rai for rice. She scooped up the concept of the ‘One Rai Project’ and designed it for her land. Then, she chose to dig a fish pond on her farmland, and she grew catfish there. Around the pond, she grew vegetables such as sweet basil and hot basil, and fruits such as papaya and banana. She also raised 50 ducks. To learn more, she went on a field trip to model farms in Saraburi province within central Thailand organized by the Sub-district Administrative Organization which was called O.B.T. or *Ongkan Borihaan suan Tambon*. Taking part in this O.B.T. project, she learned how to make organic fertilizers from fermented food. Since 2004, she has obtained compost material from her relatives who graze cattle. In 2005, she joined the integrated farming group in NP village. She used both the Effective Microorganism fertilizer made locally and homemade organic fertilizers. She has reduced the use of chemical fertilizers since 2006 and has been introducing the method of integrated farming step by step.

Her husband was 51 years old in 2010. He often went abroad as a migrant worker in previous years. He went to Brunei as an engineer’s assistant for 3 years, to Saudi Arabia for 2 years, and to Dubai as a cook for 1 year. He said, “As I get older, I don’t want to go abroad anymore and I want to stay in this village.” Moreover, Mrs. B said, “Before the integrated farming, there was nothing to do in the agricultural off-season from January to April in the farmland. Now, I grow various

vegetables and fruits during those periods. It is good to have work all year around.” For her family, integrated farming was becoming one of choices to stay in the village.

### **5.6 After the Life of Rural Migrant**

I interviewed 48 households and the average age of informants was 52 in NP village. Further, 30 out of 48 informants had experiences of migrant workers in their family members. As mentioned earlier, working as the migrants is a part of life of NP villagers because there is not enough work during the agricultural off-season in the village. However, it becomes increasingly difficult to be migrant workers as they grow older. Then, they attempted to find an alternative way of life. Integrated farming group was favoured by the half of the households in NP village and villagers who joined the group got various supports from the group at the grass-route level because this group share the common problem consciousness of NP villagers. According to the National Statistical Office (NSO 2007c), the proportion of elderly was 10.7% in the northeast region in 2007. In Northeast Thailand, it is worth considering the alternatives of staying in the village after the life of migrant workers, particularly in the aging society.

## **6. CONCLUDING REMARKS**

Farmers came to receive income from farm work all year round after introducing integrated farming in both cases of Mr. A and Mrs. B presented. Again, the principal features of integrated farming are multiple cropping, depending on the availability of various crops, and various kinds of farm work including raising livestock throughout the year. If a farmer grows only rice in the region without irrigation, which makes it impossible to perform double-cropping of rice, the farmer must look for other work during the agricultural off-season. That is why there are many migrants from NP village, as explained in earlier. The integrated farming group in NP village was, in fact, built by NP villagers due to their problem consciousness on these matters.

Thai society has come into the aging society. It is easier to be migrants when villagers are young. But it is difficult for villagers to go to cities and go abroad as migrants as they get old. There are choices to stay in the village during the agricultural off-season by means of subsidiary business and the cash remittance from younger migrant family members. Additionally integrated farming can be one of the available choices for farmers to remain in their villages all year round. It is thus related to the possibility of applying a sustainable agriculture development for increasing the job creation and economic viability of rural areas. This implication will have significance for rural

areas in Southeast Asian countries which will accept this common issue of an aging society in the near future.

This paper also acknowledges some limitations of this statement. First, as explained in the background section, sustainable agriculture now covers only a limited amount of land in Thailand. Some readers may have the mistaken perception that there is a great deal of five types<sup>7</sup> of sustainable agriculture practices in these areas. In reality, these alternative practices are limited, if we regard them as percentages of the total land area. This indicates that there have been difficulties in changing farming methods without supportive environment. Second, according to statistics, the number of farmers who derive from non-agricultural income has increased. Pasuk noted that non-agricultural income was indispensable in the lives of small-scale farmers in the northeast region in the 1990s (Pasuk 2002: 125) as well. Generally, farmers now tend to seek opportunities for income generation in non-agricultural work rather than from agriculture alone.

The most common criticism made against integrated farming is that it is difficult for small-scale farmers to apply integrated farming because of their limited domain. However, the integrated farming group in NP village applied the 'One Rai Project' with some success could be used by small-scale farmers in a practical manner. Furthermore, this group shared common awareness of the issues among NP villagers such as costs of migration, drought, and remote area. This group shared their knowledge and experiences with villagers. The activities of this group showed one of the possibilities of staying in the village by creation of the farm works during the agricultural off-season.

This study, although limited in scope, may help to depict that in rural areas in developing countries that do not have enough national welfare or safety nets, further research on rural life strategies is basic to the study of human security for rural areas, and will, it is hoped, have a more focused impact on agricultural policy.

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## **Human Security Issue in Indonesia: Focusing on Gender Gap in Education**

Yuni Azzizah<sup>1</sup>

### **Abstract**

Since the declaration of Millennium Development Goals by the United Nations in 2000, gender equality in education has become a more serious issue globally. A number of countries have set goals to solve gender inequality in education by 2015. It is a well-known fact that there is a gender gap in education access in developing countries. This paper analyzes the gender inequality issues of education access in Indonesia and its correlation with human security. Where education is an integral part of the human security concept. Education is a part of the promotion of the human security. Without education, the concept of human security will be hard to be understood by people. These issues include freedom from want, freedom from fear and living with dignity, giving emphasis to the field of education and the presence of the gap between men and women. The reason behind this gender gap and what the government and community should do in order to solve this problem will also be explored.

By looking at the data provided by the Indonesia Statistical Bureau, it was found that the rate of uneducated females is higher than the rate of uneducated males. The data also indicates that the gap is larger in rural areas than in urban areas. There are negative factors that keep the rate of uneducated females larger than the rate of uneducated males, such as: a poor economy, poverty and government policies in managing national education funds to solve the problem, there is also a correlation between human development index and the female uneducated rate. Aside from economic issues, the cultural issues of Indonesia also detain gender equality in education. Multicultural Indonesia is largely dominated by patrilineal cultures, which tend to make having a strong son a preference in family, which is also a common problem in developing countries.

### **Keywords:**

Indonesia, Education, Gender, Human Security, Policy.

## **1. Background**

In this modern era, education has become one of the problems that cannot be unnoticed when learning about world population. In 2004, Herz and Spurling explain that two thirds of the people that do not have access to education are female. 65 millions of female have never even gone to school and 100 millions female have not finished their primary education, their chance to get the education can be said to be far from equality to those of the male.<sup>2</sup> More than 542 millions female

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<sup>2</sup> Herz and Spurling, 2004, 2; Introduction, Aikman and Unterhalter, 2005, vii

are illiterate; according to UNESCO this lack of literacy is often associated with poverty and discrimination.<sup>3</sup>

In this unfortunate condition, there is a little movement toward this education equality problem which was addressed in September 2000 in United Nations Millennium Summit. Two millennium development goals (MDGs) had been announced, with the target of eliminating gender disparities in primary and secondary education by 2005 and in all levels of education by 2015. Therefore, by starting the implementation of these MDGs, every country that has not been able to achieve the requirement or has still far from achievement are hoped to try and make efforts to achieve these target.

As the deadline of 2015 approaching, United Nations are establishing a successor framework to MDGs on the Post 2015 Development Agenda. In parallel, a set of sustainable development goals (SDGs) is agreed among the governments at the 2012 United Nations Conference on Environment and Development. The proposed SDGs would be applicable to all countries, regardless of their development level. Targeting beyond 2015, there is a strong consensus to the unification of the SDG and Post 2015 process to create a single set of global goals.<sup>4</sup> The importance of primary education achievement is still an emphasized priority.

One of the countries that make efforts in achieving the targets of MDGs is Indonesia. Indonesia is a country located in South East Asian region that is the fourth most populated country after China (1,347 million)<sup>5</sup>, India (1,210 million)<sup>6</sup> and United States of America (314 millions).<sup>7</sup> It is an archipelago consists of 17,508 islands with 5 main islands of Sumatra, Java, Borneo, Sulawesi, and Papua. Indonesia consists of 34 provinces and, according to the 2010 national census, is populated by 237.6 millions people of which 58% of them live in Java Island.<sup>8</sup> With 85 % of the population are Muslims, Indonesia is a Muslim majority country, it has the largest Muslim population in the world. There are almost as many Muslims living in Indonesia as in entire Arab-speaking countries combined.<sup>9</sup>

The improvement of female condition is can be seen from female education and female empowerment. The current condition of Indonesia suggests that condition of female education and female empowerment is independence.<sup>10</sup> Hence, the female education can be evaluated

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<sup>3</sup> UNESCO, 2003/2004, 87; Introduction, Aikman and Unterhalter, 2005, vii

<sup>4</sup> United Nations Department of Economic and Social Affairs, 2013

<sup>5</sup> National Bureau of Statistic of China, 2011

<sup>6</sup> Government of India Ministry of Home Affairs, 2011

<sup>7</sup> United States Census Bureau, 2011

<sup>8</sup> BPS, 2010

<sup>9</sup> Gade, 2004, p1; Buehler, 2009, 51

<sup>10</sup> Samarkun, Parinduri, 2014

independently from their empowerment. In this paper we take a look on the female development from the perspective of their education achievement.

## 2. Education and Women in Indonesia

The 1993 Guidelines of State Policy of Indonesia indicated that education, particularly formal education, in Indonesia has been the national government's priority for development since the implementation of the Second- Five Year Development Plan (Repelita II) from 1974/1975 to 1978/1979. With the objectives of improving the standard of living and creating more employment opportunities, education has been strongly promoted for school-age children. As ascertained by the improved rates of literacy.<sup>11</sup> Indonesia implemented six years of compulsory education in 1984, which was then extended to nine years in 1994. As a result, school attendance from age 7-15 has increased from 55.6 percent in 1971 to 87.6 percent in 1985 <sup>12</sup> and up to 93.9 percent in 2012.<sup>13</sup> The development of female education has still lagged behind in percentage than the male education. As shown in the table 1

**Table 1: Provinces with large illiteracy rate and illiteracy rate gap in Indonesia<sup>14</sup>**

Provinces	Male (%)			Female (%)		
	2009	2010	2011	2009	2010	2011
Yogyakarta	4.33	3.80	3.38	13.42	12.77	11.81
East Jawa	6.31	6.51	6.06	15.35	14.39	14.41
B a l i	6.33	6.37	4.88	16.54	14.64	14.60
West Nusa Tenggara	10.99	12.06	9.87	22.49	20.60	18.69
P a p u a	23.07	25.70	28.12	32.76	33.85	40.19

Literacy or the capability of a person to read and understand words is a basic objective of education. By requiring education, illiteracy should be wiped out. Indonesia literacy rate of 92.6 % for both sexes can be categorized as high. Unfortunately, if we closely examine the data provided by Indonesian Central Agency of Statistics, for three consecutive years from 2009 to 2011, female illiteracy rate is larger than the male illiteracy rate. Male illiteracy rate in 2009, 2010 and 2011 are 3.88 %, 4.19 % and 4.01% respectively while female illiteracy rate in 2009, 2010 and 2011 are 9.20 %, 8.47 % and 8.88%. The largest gap between male and female illiteracy rate is in the Papua

<sup>11</sup> Praslowati, Sri 2002, 1

<sup>12</sup> Hill, 1994, 161; Praslowati, Sri 2002, 1

<sup>13</sup> BPS, 2012b

<sup>14</sup> BPS, 2011a

island region, with a gap of 9.69%, 8.15% and 12.07 in 2009, 2010 and 2011 respectively. <sup>15</sup>

In addition to the illiteracy problem, uneducated children problem should receive more attention from the government. As shown in table 2, there is a similarity to the illiteracy problem case; the female uneducated children rate is also larger than male uneducated children rate. The total uneducated children percentages in Indonesia are 6.67 % in 2009, 6.50 % in 2010 and 72 % in the year of 2011. There is an about 0.48% averaged decreasing trend in last three years of 2009 to 2011.<sup>16</sup>

**Table2: Indonesia percentage of uneducated children 2009-2011<sup>17</sup>**

	MALE (%)			FEMALE (%)			MALE+FEMALE (%)		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
URBAN	1.96	1.91	1.82	5.88	5.31	5.31	3.96	3.62	3.58
RURAL	5.63	5.96	4.93	12.77	12.80	10.83	9.26	9.39	7.86
URBAN+ RURAL	3.84	3.94	3.38	9.41	9.04	8.05	6.67	6.50	5.72

We can see in table 2 that there is a gap between male and female uneducated children percentage and the uneducated percentage in rural area is larger than the urban area in both sexes. The statistics indicate the rural areas need more attention and that the education of Indonesia should be spread more evenly outside the urban area into the rural area.

### 3. Education and Human Security

Since the declaration of Millennium Development Goals by United Nations in 2000, the gender equality in education has received more a serious attention globally. Some countries have set a goal to solve the gender inequality in education problem by 2015. We could relate education and human security with examine figure 1.

#### 3.1 Education and Personal Security

Education is an important asset to an individual and it also has intrinsic value. The capability to read and to write improves the quality of life and directly affects people's security, because illiteracy

<sup>15</sup> BPS, 2011a

<sup>16</sup> BPS, 2011b

<sup>17</sup> BPS, 2011b

and innumeracy are themselves insecurity.<sup>18</sup> For example, people that are uneducated or illiterate will find difficulties in adapting to the development of this modern age and they will not be able to understand their rights and their role as a society in a country. An uneducated people will be dependent on other people. They will ask other people to read or write on their stead whenever there are important things or correspondent to be done, which is a very risky thing to do in case the people that help them have a bad intention.

### 3.2 Education and Economic Security

Education most surely affects the economical condition of a person. Basic education usually increases the prospect for gainful employment, increasing returns to land or other assets. It is far more critical today than a generation ago, when the manufacturing and agricultural sectors absorbed more of the workforce. Expanding the reach of education improves economic prospect for individuals, for communities and for countries. Its attainment influences one's employment and income, and in turn shapes the economic condition. Low attainment leads to low expected, which translates into economic hardship. Yet at the same income levels, poorly educated people tend to experience greater hardship than the well-educated.<sup>19</sup> Poverty and lack of education synergistically strain economic condition; each factor makes the effect of the other worse. Education provides skills and information to help people in tackling the stresses of life, including a low income. In the other hand, lack of education makes it more difficult to cope with an inadequate income.

**Figure 1: Human Security main categories that related to education**



<sup>18</sup> Ogata, sadako and Amartya Sen, 2003, 115

<sup>19</sup> Cockerham et al. 1998, 62

### 3.3 Education and Health Security

Primary education is a very important, especially for female as the one who will give birth to the next generation. An uneducated female will find difficulties in learning even the basic principal health knowledge which must be very important for their babies, such as immunizations, vaccination and other principal knowledge to increase the life expectancy of new born baby. A research in Ghana showed that “Children of educated mothers are twice as likely to survive to their fifth birthday as children of uneducated mothers”.<sup>20</sup> Well educated people experience better health, as indicated by high level of health and low levels of morbidity, mortality, and disability. In contrast, low education attainment is associated with high rates of infectious diseases, many chronic noninfectious diseases, poor health, low immune level, and shorter life expectancy.<sup>21</sup> Education improves health indirectly through economic and labour conditions, social-psychological resources, and healthy lifestyle. The well educated are more likely to be employed. Education provides greater access to full-time employment, which is an opportunity for a fulfilling and enjoyable work life and sufficient income that reduce economic hardship. Education increase the conscience of control, shaping the perception that one's own actions and decisions will directly result one's life and health. Well educated people report more supportive relationships. And finally, the well educated have a more positive health lifestyle: They are more likely to exercise, less likely to smoke, and are more likely to get annual health check ups. <sup>22</sup>

### 3.4 Education and Political Security

In political security issues, education plays a role as a freedom itself. Education gives freedom through knowledge, public expression and democratic debate to promote their human security. Education makes them conscious to their rights and obligations according to the law of the country so they don't become wrong victim of false accusation. Through education we can analyze our steps according to the law. We will also be able to participate in every political event such as election or be a candidate in an election. To become a candidate, education is a basic requirement for sure.

The empirical literatures on political participation suggest that education positively correlates with political participation <sup>23</sup> Theoretical explanations state that education gives

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<sup>20</sup> Watkins, 2000, 3; Ogata, Sadako and Amartya Sen, 2003, 115

<sup>21</sup> Feldman, Makuc, Kleinman, and Cornoni-Huntley 1989; Guralnik, Land, Fillenbaum, and Branch 1993; Gutzwiller, LaVecchia, Levi, Negri, and Wietlisbach 1989; Kaplan, Haan, and Syme 1987; Kitagawa and Hauser 1973; Liu, Cedres, and Stamler 1982; Morris 1990; Pappas, Queen, Hadden, and Fisher 1993; Syme and Berkman 1986; Williams 1990; Winkleby, Jatulis, Frank, and Fortmann 1992; Woodward, Shewry, Smith and Tunstall-Pedoe 1992

<sup>22</sup> Ross and Wu, 1995, 719

<sup>23</sup> Nie, Junn, and Stehlik-Barry 1996; Rosenstone and Hansen [1993] 2003; Verba and Nie 1972; Verba, Schlozman,

participation-enhancing benefits that in turn cause political activity. Verba, Schlozman, and Burns observe that “Educational attainment is, in fact, the single most potent predictor of an adult’s political activity”.<sup>24</sup>

### **3.5 Education and Environment Security**

An educated person will understand and be aware of environmental issues such as understanding that disease and illness that can be induced by an unclean environment, how to prevent them and how to cure them so that the standard of life in family level can be increased by those preventive steps. If people do not know how important their environment and that environmental problem will greatly affect their lives and they become disease prone. A study by World Bank 2002 in the correlation of education and HIV/AIDS founds that “a general basic education and not merely instruction on prevention is among the strongest weapons against the HIV/AIDS epidemic.”<sup>25</sup> This is especially important for girls, who tend to take care of ill relatives, thus make them more vulnerable to infection. Furthermore, they are more likely to have older partners and are more easily infected than boys. The Joint United Nations Program on HIV/AIDS (UNAIDS) found that “the average infection rates in teenage African girls were over five times higher than those in teenage boys. Among young people in their early 20s, the rates were three times higher in women”.<sup>26</sup> Transmitting knowledge, self-confidence and support to girls in pre-teen years is a matter of survival, while not to transmit is unconscionable.

### **3.6 Education and Food Security**

The World Food Summit of 1996 defined food security achieved when “all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. Generally, the concept of food security is defined as including both physical and economic access to food that meets not only people's dietary needs, but as well as their food preferences. In many countries, health problems related to dietary excess are an ever increasing threat. In fact, malnutrition and foodborne diarrhea have become double burden for such countries. In food security, education can be a guideline to improve the standard of live to a better one, with the knowledge of nutrition and healthy food, one can do daily activities in fit and health, not bothered by unhealthy food and insufficient nutrition supply. Education can also increase the standard of living for their family to be

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and Brady 1995; Wolfinger and Rosenstone 1980

<sup>24</sup> Kam and Palmer 2008, 612

<sup>25</sup> Ogata, sadako and Amartya Sen, 2003, 120

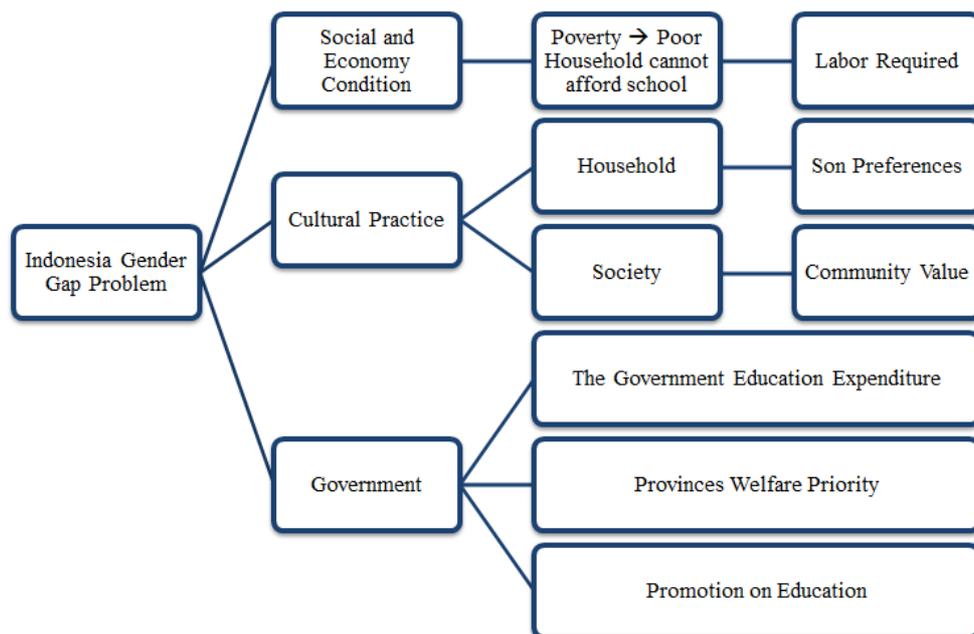
<sup>26</sup> UNAIDS, 2000

healthier. Hofferth in 2004 indicates that the chance of a family that headed by a better educated person to be food-insecure are significantly less than the family headed by an uneducated.<sup>27</sup>

#### 4. Gender Gap : Cause and Explanation

It is well known that there is a pronounced gender gap in access to and achievement in, school in many developing countries. Indonesia as one of the developing countries has this issue. It is very important to understand the cause behind this phenomenon. So we can deduce the best solution to solve or minimize the problem. There are three main cause of the gender gap in Indonesia: economical issue, cultural issue and internal issue of the government itself.

**Figure 2: Gender gap issues causes**



##### 4.1 Interaction between poverty and female education in Indonesia

In 2003, Nordblom concluded that the children of high income parents have greater chance to attain higher education than the low income parents. The income of the parents affects the response of education gap between poor and rich students to government policies.<sup>28</sup> Along with the condition of Indonesia in 2002, the United Nations Children's Fund (UNICEF) explained in their fact sheet

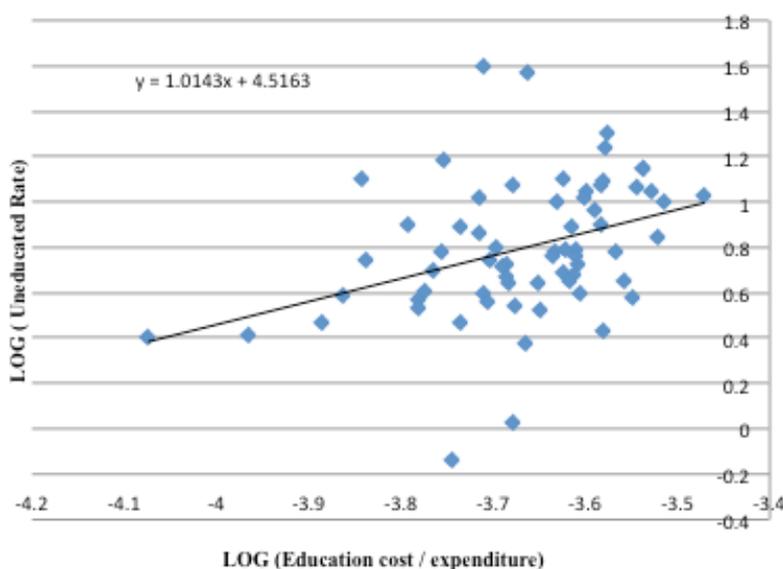
<sup>27</sup> Hofferth and Curtin, 2005, 703

<sup>28</sup> Nordblom, 2003

that Indonesia enrollment differs significantly among income groups. The poorest 20 percent of the population has a much lower (Net Enrolment Rate) NER of 49.9 per cent compared to 72.2 per cent in the richest 20 percent.<sup>29</sup>

In early 2006, International Labor Organization (ILO) promotes a survey in Indonesia to find the job market of young generation and the effect of early dropout and child labor to their living and work experiences in the future. The correspondents are 2500 people from low social economic group with age ranged from 15 to 29. Some of the result of this survey are the major cause of drop out is economical issues (79%), while some more reasons such as wanting to get to work quickly (24%), did not like school (8%) or wanted to get married (7%) are less significant. Despite of the desire to finish school, monetary problems drive the majority of the young people to enter the workplace without sufficient preparation and qualifications.<sup>30</sup>

Figure 3: Uneducated Female Vs. Education Cost



The research conducted in Indonesia by Moeliodihardjo in 2010, women in Indonesia received lower priority to be sent to school, even when they were intellectually more potential, when family's financial ability to send children to school are matter.<sup>31</sup> We can automatically concludes that the majority of Indonesia people do not go to school or drop out of school early because they do not have enough money to pay for the education. The higher the education level, the more it costs.

<sup>29</sup> UNICEF, 2002

<sup>30</sup> ILO, 2006

<sup>31</sup> World Bank, 2010

Figure 3 shows the relation of the female uneducated rate and the education cost, defined as the family education expenditures of the provinces. This education cost is calculated as the averaged ratio of how much a family must spend on education per the averaged income in the major city on the respective province.

The figure 3 shows that there is a trend in the relation of female uneducated rate and the education cost. It can be concluded from the figure that the more the education cost increase, the more the female uneducated rate increase and the more the education cost decrease the more the uneducated rate decrease. It indicates that the high education cost cause people to stop pay for their children school and make their children drop out of the school.

#### **4.2 Interaction between culture practice and female education in Indonesia**

Indonesia is an archipelago country consisting of many ethnicities, about 300 ethnic groups with 729 local languages each with cultural identities developed over centuries<sup>32</sup>, and influenced by Indian, Arabic, Chinese, and European sources. Many of Indonesia's ethnic groups have strong kinship groupings based upon patrilineal, matrilineal or bilateral descent. Such peoples are primarily in Sumatra, Kalimantan, Maluku, Sulawesi, and the Eastern Lesser Sundas. Patrilineal descent is most common, though matriarchy is found in a few societies, such as the Minangkabau of West Sumatra and southern Tetun of West Timor.<sup>33</sup> With large number ethnics, it is in essential difficult to find out the perception of each ethnic group about education. But in majority these ethnics groups are using patriarchy system. In this system the highest position in the hierarchy is held by the males. It agrees with the research conducted by Prasilowati in 2000 where social relationship based on patriarchy seems to influence the decision to acquire education.<sup>34</sup> The tendency to prioritize education to men has a relationship with superiority and power of men in society. Women tend to face this patriarchy as a social barrier when entering education. A similarity is found by Khan in his research in 2005, about the tendency of preferring to educate the boys than the girls. Whereas boys may be an investment for the parents because the boys will become the head of the family and the one who work, the girl's role is to take care of the child and the house after their marriage.<sup>35</sup>

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<sup>32</sup> Embassy of Indonesia, 2008a

<sup>33</sup> Encyclopedia, 2007

<sup>34</sup> Prasilowati, 2002

<sup>35</sup> Khan and Ali, 2005, 13

Table 3: Population (%) of 7-17 years old with no current or past formal education<sup>36</sup>

Reason why do not go to school	Urban Area			Rural Area			Urban + Rural		
	M	F	M+F	M	F	M+F	M	F	M+F
No money	49,96	55,48	52,57	46,91	48,50	47,61	48,03	51,29	49,51
Have to work	10,43	13,58	11,92	9,14	5,47	7,53	9,61	8,71	9,20
Got married or take care of family	0,29	4,61	2,33	0,32	7,54	3,50	0,31	6,37	3,05
Have enough education	3,30	3,24	3,27	3,51	4,75	4,06	3,44	4,15	3,76
Shy because economical reason	1,42	0,91	1,18	1,30	1,28	1,29	1,34	1,13	1,25
Far from school	0,33	0,65	0,48	5,66	6,35	5,96	3,70	4,08	3,87
Disability	4,97	3,50	4,27	3,35	3,37	3,36	3,95	3,42	3,71
Waiting for the announcement	0,83	1,42	1,11	0,18	0,45	0,30	0,42	0,84	0,61
Unqualified for entrance	0,41	0,16	0,29	0,43	0,60	0,50	0,42	0,42	0,42
Others	28,07	16,44	22,56	29,20	21,69	25,89	28,79	19,60	24,62

The above table shows the result of the survey that was conducted by Indonesian Government. It shows that apart from socio-economical problem in point 1 and 2, cultural issues also affect the female uneducated rate, which is higher than the male uneducated rate. One of the causes for female is taking care of the family; it is a clear characteristic of patrilineal system. Therefore cultural practice is indeed a major cause for the high uneducated rate of female. We can also deduce that female uneducated rate in rural area is higher than the urban area because female is more required to married and more responsible in taking care of the family in rural area more than in urban area. In rural area, there is a strong influence of culture while the urban area tends to be more modern and more heterogenic culturally.

#### 4.3 Interaction between government and female education in Indonesia

Government is a primary actor on the educational problem in Indonesia. Ministry of Education holds the power to regulate curriculum education system of public schools and some of the private school, while the curriculum of Islamic school is regulated by Ministry of Religious Affairs. Indonesia citizen are obliged to get nine years the primary education that are six years in elementary school or madrasah idtidaiyah and three years in middle school or madrasah tsanawiyah. Now,

<sup>36</sup> Ministry of Women Empowerment and Child Protection Republic of Indonesia, 2012b

education in Indonesia is regulated by the 20th Law in 2003 about National Education System, article 6 paragraph 1 states that every citizen of age 7 to 15 years old are obliged to follow the nine years of primary education (Elementary school or equivalent and Middle School or equivalent).<sup>37</sup>

After the declaration of the 22nd and 25th Laws in 1999 and 25th Government Regulation in 2000, the large portions of education managements are delegated to the regional governments. In the end, Indonesia adopted new scheme in handling education administration issues that is School Based Management (SBM).<sup>38</sup> These laws and regulations are created with the objectives to empower the regional governments in managing national education in their area, especially from preschool to high school educations. Even then, the power to formulate, implement, monitor and evaluate the national education policies is still in the hand of central government. That's why it is hard to separate the role of the government from its citizen education issues. The regional government is making efforts to resolve the education issues.

We can categorize the role of the government and its connections with education into three levels that are: the decision maker government level, the regional government level, and the education promoting government level that directly interacting with the people.

### **The Government level: Expenditure on Education**

Education will not be able to be implemented in the country without the allocation of monetary budget from annual government budget. Indonesian government fixes the education budget allocation at 20% of the national budget. Figure 4 shows the increasing budget allocation of Indonesia education. But in the regulation in the regional level, the central government does not have a strong authority to intervene.

The monetary budget from the central government then managed by the regional government to be used to promote the education of their regional. Including solving the uneducated children problem and female education issues. There is a relation between the female uneducated rate and the province government education expenditure per population.

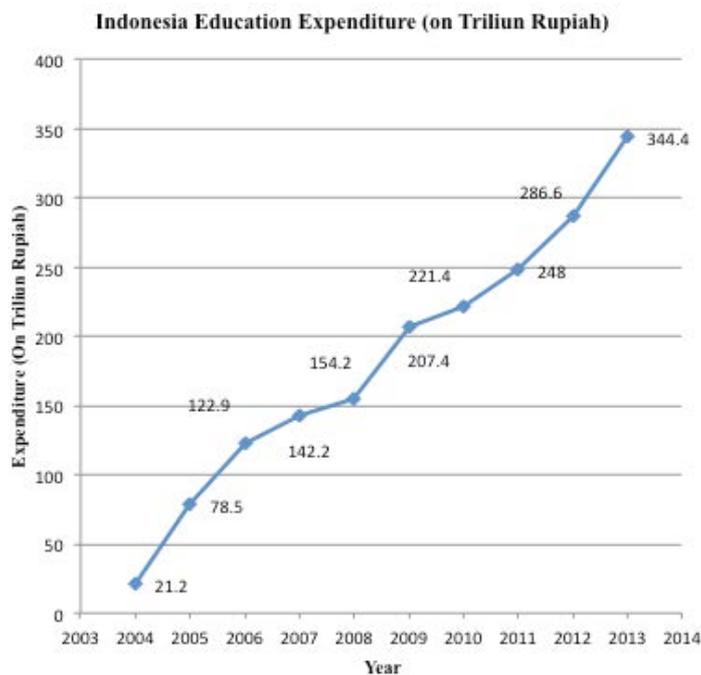
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<sup>37</sup> UNESCO, 2003

The English version of the Act as published originally in Bahasa Indonesia in the National Gazette Number 78 Year 2003. The original text of this Act in Bahasa Indonesia is the authentic version

<sup>38</sup> Indriyanto, Bambang, 2003

**Figure 4: Budget Allocation on Education of Indonesia<sup>39</sup>**



**Figure 5: Female Uneducated rate vs Provinces Expenditure on Education per population**

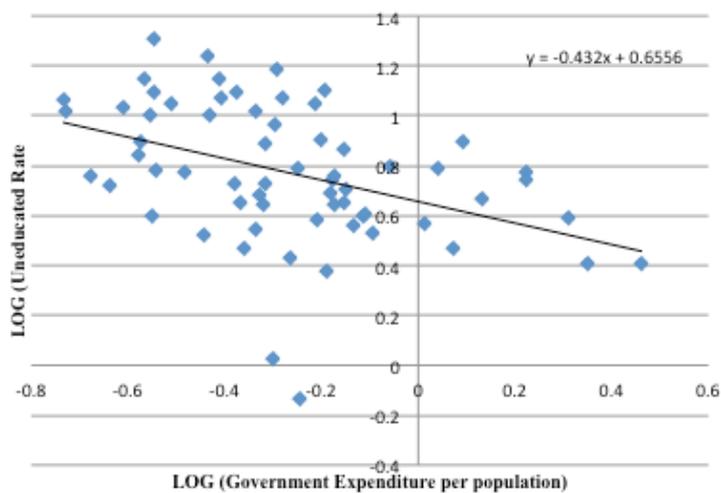


Figure 5 shows the relation between female uneducated rate and government expenditure per population. It is a good indicator to judge the role of the government in increasing the education level and making effort to reach the MDGs. As expected, the higher the government spend on education, the less the uneducated rate. If the opposite occurs, if the increase in the education budget

<sup>39</sup> Rajasa, Hatta 2013

is not accompanied by the decrease in the uneducated rate, the government policy is questionable. However, it is important to notice that the decrease in the uneducated rate is proportional to the government expenditure per population of the citizen in that region, not only to the government expenditure. Therefore the central government should also take into account the number of population of the region population to decide the distribution of the education budget, not only to the area of the region or the economical importance of the region.

### Provinces Welfare Priority

Along with the implementation of this education autonomy of regional government, the welfare of a region is a very important point to look at. It appears that regions that have high Human Development Index (HDI) will have low uneducated rate.

**Figure 6: Uneducated rate vs Human Development Index**

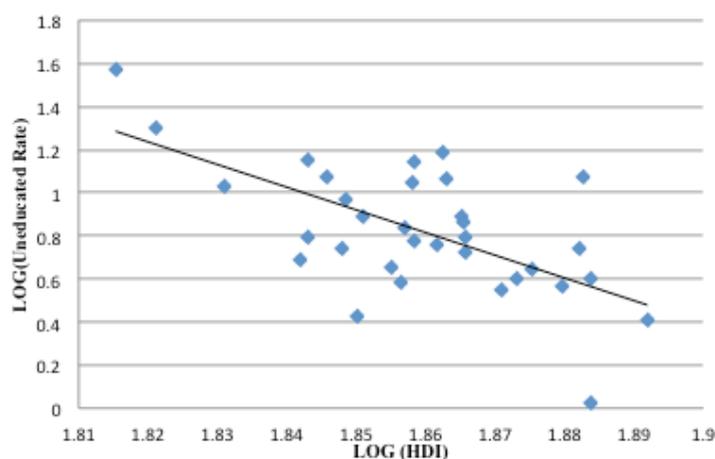


Figure 6 is a result of compiling the data of all the provinces of Indonesia. From this figure we can conclude that the HDI of a region is indeed related to the female uneducated rate. The higher the HDI of a region become, the lower the uneducated rate becomes. The responsibility of regional government of the female education issues in their region is one of its duties as government to protect the human security of their citizen. Along with the increase in the welfare of a region, its education will also increase. In contrast, the low HDI region will have a high uneducated rate. Even after the implementation of decentralization regional, this controversy is still not yet solved. It will be very risky if the central government is not alert in taking care of the wide regions of Indonesia. For example, a region that has a low HDI despite having rich natural endowments will not be able to develop their education if the central government does not intervene directly. But the dilemma

happens when the central government is not be able to intervene much in making the regional decision, it can slow down the education development of their region.

### **Government Promotion on Education**

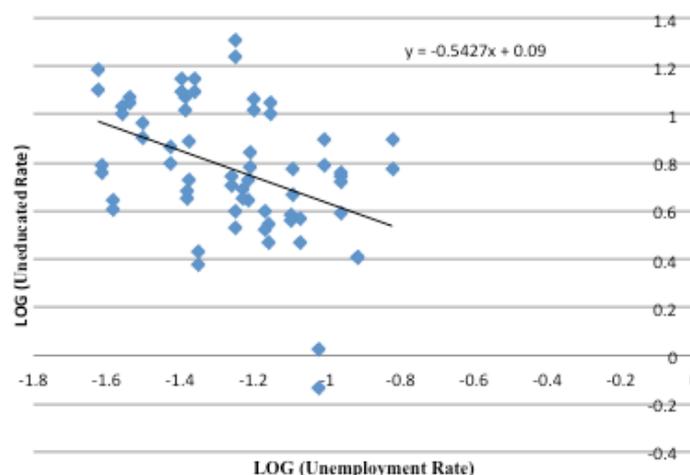
A policy, if not been promoted is meaningless. It is very important to make effort to promote a government policy to their citizen. The principal law of Indonesia, the 1945 Constitution's preamble, it is clearly stated that the country's aim is to promote the social welfare and to increase the education of the citizen. Education is a process to increase the intelligent of the citizen.<sup>40</sup> To achieve the target, human development is an important factor that should be prioritized. The main factor to the success of the development of a country is the availability of the qualified human resources. Education is one of the ways to increase the quality of the human resources. The flaw in education promotion in Indonesia is a responsibility of the government of Indonesia to make more effort in promoting education, especially to rural areas. In the majority of Indonesia rural area there is still a difficulty to access the information to understand the quick development of the modern world.

In survey that was conducted by ILO in 2006 shows that education is still considered to be less important by some of the people. Only 28% of the respondent answered that education is very important, while the other 43% answered somewhat useful and 26% answered it is not important. For female, 26% thought that education is not useful, while 40% answered somehow useful and 31% thought that it is unimportant.<sup>41</sup> If we see those number, it is a very unfortunate that many people still doubting the benefit of education, although education is a part of human security of every person that cannot be separated from them, and without which it is hard to increase their standard of life. The figure 7 shows the relation between female uneducated rate and unemployment rate. The data trend shows that the uneducated rate decreases as the unemployment rate increases. However, it is inappropriate to conclude that this is imply education hinder the employment rate, rather, this is implying that high people see education as a factor to increase their future, therefore people encourage education to counter balance high unemployment.

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<sup>40</sup> Embassy of Indonesia, 2008b

<sup>41</sup> ILO, 2006

**Figure 7: Female Uneducated Rate vs Unemployment Rate**

#### 4.4 Summary of the Relationships between Uneducated Rate and Family, Job Market, and Government Factors

We can summarize the three major cause of the uneducated rate that is family factor, job market factor and government factor. The family factor is represented by the averaged ratio of the education expenses of a family. This variable represents how important the family judges the importance of education, economically and culturally. The job market factor is represented by the unemployment rate. The major causes of the early drop outs are related to economical reason so that these children must enter the job market instead of continuing their study. And the third factor is the government factor, which represented by the government expenditure on education per the population of the respective region. This factor represents the role and the effort of the government in increasing the education level.

These three variables represent the social and economical conditions factor from internal, that is family and external that is job market and government. The relation between these variables and uneducated rate of a region in Indonesia can be summarized in the following equation.

$$\log w = c_0 + g_0 \times F + c_1 \log x + g_1 \times F \times \log x + c_2 \log y + g_2 \times F \times \log y + c_3 \log z + g_3 \times F \times \log z$$

Where  $w$ ,  $x$ ,  $y$ , and  $z$  represent the uneducated rate, the family education expenditure, the unemployment rate and the government averaged education expenditures respectively, while  $F$  is a dummy variable with a value of 1 for female and 0 for male. The value of the constant and linearity coefficients shown in table 4.

Table 4: Values of linearity coefficients.

Variable	Value
$c_0 =$	2.7307
$g_0 =$	-1.6354
$c_1 =$	0.7502
$g_1 =$	-0.4982
$c_2 =$	-0.3041
$g_2 =$	-0.1121
$c_3 =$	-0.1963
$g_3 =$	-0.094

The gender gap is represented by  $g_0$ ,  $g_1$ ,  $g_2$ , and  $g_3$  coefficients. For female the relation can be approximated as  $w_{female} \propto x^{0.25}y^{-0.4}z^{-0.3}$  and the male relation can be approximated as  $w_{male} \propto x^{0.75}y^{-0.3}z^{-0.2}$ . These equation means that if  $x$  (education cost) increases 2 times, while  $y$  and  $z$  constant, then female uneducated rate will increase 1.19 times and male uneducated rate will increase 1.68 times. It means that female still care about education even when the education cost is high.

If  $y$  (uneducated rate) increases 2 times, while  $x$  and  $z$  constant, then female uneducated rate will decrease into 0.76 times and male uneducated rate will decrease 0.81 times. It means that high unemployment rate will drive females to pursue their education. If  $z$  (government expenditures) increases 2 times, while  $x$  and  $y$  are constant, then female uneducated rate will decrease into 0.81 times and male uneducated rate will decrease 0.87 times. It means that female education is more affected by the government policies.

It is noticed that if we taking into account all three variables, the result appears to indicate that when family expenditure and government expenditure is unchanged, the increase in the unemployment rate will be accompanied by the decrease in the uneducated rate. We must be careful not to conclude that the increase in education will increase the unemployment, rather we must consider that the family and government expenditure is a part of the economical variable and unemployment rate is a social factor, then we can conclude that when the economical factor is unchanged, child education will increase when the employment rate is increase. Means that the family will prepare their child to be able to enter the job market by supporting them to pursue their education.

## **5. Solution and The Future Plan**

Indonesian government put its effort on achieving MDGs by increasing the growth of female participation both in education, which can be represented by education gender gap. NGOs have numerous programs to increase women condition by means of informal education and training around Indonesia. However, the achievement of formal primary education is still an important part for female education. In the formal education sector, Indonesian government plays the biggest role.

In this paper we evaluate the formal education achievement by assuming that all provinces in Indonesia have relatively same socio-economic condition, except for two provinces: Papua Barat and Papua Provinces. From statistical data of provinces of Indonesia in 2010 and 2011, we find the cause, reason and obstacle in the education environment, especially for female. It is clear that female is more affected by the government policies in sustaining their education. The central government should revisit the education monetary budget distribution, the increase in the budget of one region may not induce the increase in the female education, other parameters such as population, as we already proved, directly affect the education level.

The quantitative relation still has a large error margin. The more detailed classification of the condition of socio-economic conditions of the provinces may produce more precise quantitative relations. Further study is needed in examining the socio-economic and human security condition of West Papua and Papua.

## **6. Conclusion**

Education is a problem that is really needs to look at in this global era. It is clear why education became one of the priorities in Millennium Development Goals of United Nations, and every country is obliged to set their goal to solve this problem in 2015. Its relation with human security is also undeniable. Because with education people tend to feel secure and they will be able to live as they expected. It is consistent with the basic principle of human security that are: free from want, free from fear and live with dignity. Without education, there is some form of insecurity.

In Indonesia, education is one of the main agenda of the government, as the development of Indonesia economy, the education of Indonesia is also developing. But it is also clear that there is still a gap between male and female, and there is also a gap between the rural area and urban area, where the percentage of education problem in urban area is bigger than in the rural area. Economic factor of the people also become a main issues. The developed industry in urban area increases the

people standard of people that live in urban area. The awareness of the importance of the education that is supported by the availability of the fund causes the urban area to have a better education than the rural. Similarly, the female education, that is less than the male education, the economical factor of the family may cause the conflict of interest between the family and the children. The boys is tend to be chosen as the investment of the family than the female. It is related to the patrilineal culture that has been rooted to Indonesian cultures.

Education is a significant factor that can increase the quality of human resources and is a solution to human insecurities especially Indonesian female, that's why education development is need to be planned comprehensively taking into account of all the indicators such as the economical, demographic, education, natural resources potential. Here the role of the government is important; because education cannot be changed by the people. It is a duty of the government to constantly improve the standard live of the citizen. The education agenda is the country agenda that involves the human security of its citizen and the security of the country. We can imagined that if the uneducated female citizen will give birth to low quality next generation, the quality of the country is questionable, the existence of the country is threatened because its citizens do not understand their rights and their duty as a citizen.

In principle, Indonesia government constantly gives significant changes in solving the education problem. But those efforts are still not be able to solve the female education issues.

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