Human Capital Development: Its Implications to Poverty Alleviation

Beverly B. Bicar

Abstract

This study examined how human capital development relates to poverty alleviation. Specifically, it analyzed trends in basic and tertiary education in consonance with the prevailing poverty incidence in the country, examined whether the human capital production in the poor regions of Luzon, Visayas and Mindanao complemented with the regional development agenda of the local government, and formulated the implications of poverty alleviation to human capital development. Results showed a strong relationship between the drop-out rates in basic education and the poverty incidence in the different regions of the country signifying that poverty mitigation is a crucial element of human development. It was also found that the alignment of regional development frameworks with the program offerings at the tertiary level as well as the LGUs' provision of job opportunities for college and university graduates are important determinants of poverty alleviation.

Key words and phrases: human capital development, poverty alleviation, education

Introduction

Human capital development is one of the major concerns of the Philippine society. It has become progressively compelling amidst the burgeoning poverty affecting the Filipinos for decades. The Philippine government has launched a number of initiatives to resolve the problem. Millions of pesos have already been given out to help curb the incidence of poverty (Reyes & Valencia, n.d.). Privileges have been dispensed to the vulnerable sectors, most specially the aged, to prevent them from becoming a burden of the working population (R.A. 7432, R.A.9994). The accelerating prices of basic commodities spurred the institutionalization of certain modes of subsidies aimed at easing the pressure among the people belonging to the lower economic strata (Reyes & Valencia). However, social surveys continue to report that despite the implementation of well-intentioned programs, many Filipinos increasingly experience hunger and deprivation.

The problem is compounded by the following disturbing facts despite the claims of a steady increase of the Gross Domestic Product (GDP) in the country for the past years: 1) 3.86 million families lived below the poverty threshold with the magnitude of poor population pegged at 23.1 million in 2009; 2) Caraga, ARMM and Region IX continue to register the highest poverty incidence while Region VII, Region V and Region VI have the

biggest share in the total number of poor families; 3) Consistently cited as poorest provinces are Agusan del Sur, Maguindanao, Surigao del Norte, and Zamboanga del Norte; and 4) Four provinces in Mindanao recently joined the cluster: Davao Oriental, Sarangani, Sulu and Zamboanga Sibugay (Virola, 2011). Most of those who are considered to be poor in rural areas consist of lowland landless agricultural workers, lowland small farm owners and cultivators, upland farmers including tribal communities, and artisan fisher folks (Cainglet, 1997).

The escalating incidence of poverty in the country inevitably casts doubt on the adequacy of the schemes adopted by the government to respond to the needs of its potential labor force. It is a known fact that the advent of globalization and modernization of technology brought some compelling demands for the workforce. With the work environment becoming more complex, this information era requires the acquisition of a whole network of skills to ensure one's access to gainful employment (Fadel, 2010). This is most crucial in the Philippine setting where employment remains fiercely competitive if not scarce even at the local level.

Access to productive employment remains a challenge among most Filipinos. School-aged children often leave school for a number of reasons before completing basic education and are forced to do menial jobs (FLEMMS, 2003; International Labour Organization, 2010; Nava, 2009). Profitable jobs elude even those who have college degrees. It is a common observation that the volume of job aspirants leads employers to require a college diploma even for work specifications that do not normally require one. Graduates from reputable institutions have a better opportunity to secure high-end positions while the rest of the job seekers jostle for low-paying jobs (Arcelo, 1999, as cited by de la Cruz, 2013). Unfortunately only a small fraction of Filipino students secure admission in reputable institutions. Many have to settle for more accessible programs which do not necessarily guarantee well-paying jobs.

Literature Review

Human capital, from which the concept of human capital development is drawn, refers to the "education, skill levels, and problem-solving abilities that will enable an individual to be a productive worker in the global economy of the twenty first century" (Hersberg, 1996). It also represents the investment people make themselves that enhance the economic productivity (Olaniyan & Okemankinde, 2008). An online dictionary defines the term as "the set of skills which an employee acquires on the job, through training and experience which increase that employee's value in the marketplace (Investor Words.com). In the context of these definitions, human capital while regarded by experts as the fundamental and critical determinant for national productivity and efficiency, depends on a number of factors, one of which is the kind of education one is able to access.

Olaniyan and Okemakinde (2008) declared that the engine growth rests on the quality and quantity of education in any country and that formal education is highly instrumental and even necessary to improve the production capacity of a nation. However, Van der Berg (2011) asserts that the relationship between poverty and education actually operates in two directions: poor people are often unable to obtain access to adequate education, and without adequate education people are often constrained to a life of poverty. He cites Psacharopoulos and Patrinos (2004) who found in their study that the returns of education, referred to

as the quantified benefits of investing education, were highest at the primary level. He further invokes Grommet (1996) who maintained that primary education is most important for economic growth in low income developing countries, secondary education for middle income countries and tertiary education for rich countries.

Montalvo (2004) did a study on education, poverty and development in the Philippines based on the assumption that education is important to a country's economy since it engenders "social mobility, equity, public health and better opportunities for employment." Among his findings were the following: 1) the government's allocation on education was decreasing; 2) the decrease in the contribution of labor quality to productivity is partly caused by the low and deteriorating quality of education; and 3) the dropout rates and survival rates are among the factors that were found to positively correlate with the extent of development of the regions.

Le Thi Ai Lam (2005) also conducted a similar study on the human resource development and poverty in the Philippines. He claimed that although the country had reduced the incidence of poverty from 1985 to 2000, it was still not able to keep up with the economic increments observed in other Asian countries. In fact, he claimed that the Philippines is encountering "severe poverty problems." While some regions in the country are progressing in terms of reducing poverty incidence, other regions like Bicol and Mindanao continue to experience high rates of poverty which continue to go higher over time. The problem becomes repetitive since the children of the poor have little chances of finding jobs due to their inability to access quality education. He noted that "the worse outcomes in labor markets of the poor compared to non-poor can be seen in the lower domestic rate of return each year of education in elementary compared to secondary and in secondary compared to higher education and it does not help that the government's education spending policies are not designed to benefit the poor." Li Thi Ai Lam's study is confirmed by Virola (2011) who traced the trend of poverty alleviation in 2006 to 2009. He reported that these years, while the other subsistence incidence among families and among population improved, there was a slight reduction of poverty incidence among families and among population in the same period.

The foregoing discussions indicate that the prevalence of poverty incidence seems to persist especially in certain parts of the country despite the government's adoption of different measures to resolve the problem. This led the current research to investigate the extent by which the Philippine government is empowering its human resources via its educational agenda. It also scrutinizes the efficiency of its anti-poverty measures to foster human capital development.

Purpose of the Study

This paper sought to investigate the human capital development in the Philippines and its implications to poverty alleviation projects. Specifically, it intended to:

1. Analyze the trends in basic education in consonance with the prevailing poverty incidence in the country;
2. Examine whether the human capital production in the poor regions of Luzon, Visayas, and Mindanao complements with the regional development agenda of the local government, and
3. Formulate the implications of poverty alleviation to human capital development.

Methodology

The study utilized the descriptive method of research. As such, it made use of both quantitative and qualitative data secured from the websites of government agencies. This paper subscribes to the assumption that prior to the publication of these data, the concerned agencies have adopted rigorous steps of verifying the figures to ensure their authenticity. Furthermore, the statistics presented in the websites was compared to other online sources in order to establish corroboration.

The information that were generated included the 1) survival rates at the elementary and secondary levels; 2) poverty incidence by region; 3) anti-poverty alleviation projects implemented by the different administrations; and 4) the development framework of the selected regions in Luzon, Visayas, and Mindanao.

Focusing on the data from SY 2000-01 to 2008-09, the average cohort survival rates at the elementary and secondary levels were computed to determine the prevailing pattern. Similarly, the average poverty incidence was calculated using the available data in 1997, 2000, 2003, 2006 and 2009. It is noted that the report on poverty incidence is released by the Philippine government every three years. The correlation between the cohort survival rate and poverty incidence was then established using the Pearson r.

The poverty alleviation initiatives of the four different administrations were analyzed on the basis of the project focus, the budget as well as the outcome. The impact of these projects on basic education was subsequently ascertained by looking at the cohort survival rates in basic education during the years they were implemented.

Finally, the development needs of the poor regions were identified based on the postulated frameworks of the local government units (LGUs). These were analyzed considering the volume of graduates produced by the tertiary education institutions in response to the human resource requirements of these development priorities.

The relationship between the identified development needs and the available human capital resources of the regions was determined by the basic assumption that the local government units have outlined the developmental agenda based on the urgency of their needs. The disciplines at the tertiary level which can most likely contribute to the realization of the desired developmental frameworks were then identified and clustered (e.g., forestry is aligned with environmental preservation, teacher education for education, tourism for eco-tourism, etc). These disciplines were ranked based on the total number of graduates produced by the higher education institutions in the region from 1997 to 2004 with the underlying presumption that the volume of these human resources can help diminish the incidence of poverty among the families years later. The relatedness of the needs and the labor supply of the regions was calculated using Spearman rho and the results are shown in Table 8 (See Appendix H).

Discussion and Analysis

The figures shown in Table 1 and Table 2 (see Appendix A) indicate that the average cohort survival rate in the Philippines is much higher at the elementary level (x=68.01) than at the secondary level (x=65.52). Moreover, more than a quarter of every 100 Filipino families (26.95%) and about a third of the country's total population (32.48%) live below the poverty threshold level. The relationship between the two variables was computed and the results show a high negative correlation between the cohort survival rates at both

levels and the poverty incidence of families and the population (See Table 4 in Appendix D for the value of r).

The high negative correlations obtained indicate that more depressed area, would be conducive to high drop-outs in both the elementary and secondary levels of education because of the low cohort survival rates therein. In fact, at the elementary level, 63% of the incidence of survival in elementary level is attributed to the poverty incidence in the families and roughly, 60% is due to the poverty incidence in the general population (based on the computation of determination). At the secondary level, poverty in the families and poverty in the population each explains about 20% of the drop-outs at the secondary level. These findings confirm the reports which showed that among the poverty-related reasons cited by the 6 to 24 year old school leavers are the high cost of education, not having enough money in the household, dropping from school to seek employment apparently to help augment the family's income, and the children's loss of interest in education, which could be attributed to the parents' inability to provide the basic commodities (FLEMMS, 2003; International Labour Organization, 2010; Nava, 2009).

The higher the impact of poverty on the drop-outs at the elementary level than at the secondary level can be traced to interfacing factors. Younger children are not economically productive, hence they are highly dependent on their parents' capability to send them to school. Despite the fact that basic education in the Philippines is supposedly free, incidental expenses remain a challenge. Children need to pay for transportation, allowances, school projects, school supplies, and mid-day meals among other expenditures. Eventually, students whose needs are consistently left unmet tend to lose interest in schooling especially the younger ones who are still beginning to find value in education. In most instances, couples who both need to get employed to meet the basic necessities of the family need to ask their children to do household chores such as minding the younger siblings or serving as farm helps during planting and harvest seasons. Such responsibilities will most likely fall on the younger children whose capability to make choices is limited.

To a certain extent, vulnerability of students in poverty stricken areas is less profound at the high school level based on the r-squared value of 20%. Although some adolescents tend to leave school to find employment, there are others who regard education as a high-priced commodity. It is often believed that it is a familial legacy of high priority that can "never be stolen by anyone." The pervading societal view among many Filipinos that education is the singular solution to poverty motivates students at this age to persist and even excel in school despite the financial problems commonly experienced by many. Having survived the rigors of elementary education, students at this level have the resilience to demonstrate a stronger drive to get educated. Their initiatives may include excelling in school to earn scholarships or grants from well-meaning sponsors, finding part-time jobs to help meet personal needs, invoking help from willing relatives for school support, or resorting to odd entrepreneurial endeavor (e.g., selling scraps or street food) to ease the financial pressure among parents and/or benefactors. Other high school students are much more prepared to take risks compared to their younger counterparts. This enables them to partially resolve their financial predicaments and continue schooling.

Despite the tenacity of older learners, Nava (2009) found that other reasons apart from poverty can lead students to quit school. Some of them linked this decision to being academically unprepared (as in the case of those who have reading and numeracy problems), peer pressure, and

the personal quest for autonomy and independence, which is usually associated with learners at this stage (Salyers & Mckee, n.d.). Apparently, secondary school students are subjected to a fusion of financial, psychological, social and emotional factors that determine their capability or incapability to stay in school.

On the whole, the findings show that poverty is a strong determinant for student survival at the lower levels of education. This brings out some implications on the poverty reduction programs of the Philippine government. To date, a number of programs (see Appendix E) have been launched in the country to reduce poverty especially among the vulnerable population like the children, the mothers, the farmers and the fisher folks. The Ramos administration spent millions on its Social Reform Agenda, the Estrada administration launched the Lingap para sa Mahirap, and the Arroyo administration had the Kapit-Bisig Laban sa Kahirapan. However, some sectors claimed that these previously implemented programs were "mere stopgap measures rather than long-term solutions (Reyes, 2010). They were either discontinued at the end of the presidential term, were not fully implemented due to perceived weaknesses, or were wanting of full disclosures in terms of outcomes and impacts.

Currently, the Aquino government has implemented the expanded version of the conditional cash transfer mechanism known as the Pantawid Pampamilya Pilipino Program (4 Ps). The project aimed mainly at keeping the children below 14 years old in school. This program also seeks to provide medical assistance to pregnant mothers and school-aged children to ensure that not only would they be kept in school and their health protected but that the continuing effects of poverty in the households be addressed. This is done by ensuring that the 3-5 year olds must attend daycare at least 85% of the time and the 6-14 year olds must enroll in elementary or high school and attend at least 85% of the time.

The analysis of the mechanism by which the various forms of poverty reduction programs were implemented yielded some significant observations. The projects had a singular intent to help the poor. However, the disparity of the benefits received by the poorest households continue to prevail despite the mechanisms employed to ensure delivery of the intended services. Reports indicated that the Social Reform Agenda of the Ramos administration reached 22,000 barangays out of the 42,000 targeted, the Lingap Para sa Mahirap Project of Estrada benefited 16,000 families, and the Kalahi-CIDDS of the Arroyo administration helped 42 provinces, 184 municipalities, and 9,224 barangays (*Social Welfare and Development Journal*, 2009). Many of the recipients were thought to be not really the truly poor.

The Social Reform Agenda (SRA) was regarded by some observers as a project that had the most impact among the target beneficiaries having reached the most number of recipients. The relative success of the SRA can be attributed to certain factors mostly involving the mechanisms put in place at its inception stage. The National Graduate Institute for Policy Studies in Tokyo declared this project to be the "most consultative, policy reform-oriented, well budgeted, clearly delineated, well targeted anti-poverty program in the history of the Philippines." Mechanisms to strengthen the implementation of the program were utilized. Agencies were formed to deal with the problems related to agro-industrial development, macro-economy and finance, human resources and development, physical infrastructure support, security and political development, development administration, and international relations. The projects that

were initiated included schemes that encouraged the poor to get involved, participate, become productive and not just rely on government's subsidy.

The Kalahi-CIDDS by the Arroyo Administration adopted similar measures employed in the SRA and consequently also gained some success. Certain approaches were utilized to complement the provision for improved access to human development services. These included strategies on accelerated asset reform, provision of employment and livelihood opportunities, security from violence and social protection, and institutionalized participation especially of basic sectors in governance. The Lingap project of Estrada, on the other hand, was described as a "sharp departure" from the framework used by Ramos. Instead of focusing on the poorest municipalities and barangay, the project sought to serve the poorest 100 families in each province and city. It espoused benefits which directly provided for the immediate needs of the poor including medical assistance, food subsidy, potable water, and socialized housing. Some doubts were raised however, on the implementation of the project since reports by the DSWD showed that 68% of the fund was distributed to congressmen and became another source of the pork barrel funds. Eventually, the project reached some 0.4% of the intended beneficiaries.

Huge amounts of investments were funneled into the anti-poverty measures implemented by the government in the recent decades. Every program introduced into the poor communities had a reasonably substantial amount of funding coming from different sources including the local government units, national government, and foreign stakeholders. Assessing the investment flow of anti-poverty programs and intensifying the mechanisms to monitor and evaluate their outcomes have become a necessity to ensure cost efficiency. Researchers (Reyes, 2008; Manahan & Cuenca, 2007, as cited by Bala, 2009) claimed that these social assistance modes had issues regarding leakage of benefits to the non-poor, exclusion of truly poor, and problems of cost-effectiveness. This observation is affirmed in the case of projects implemented by the Estrada and Arroyo regimes. Table 6 (See Appendix F) shows that during the years in which the Estrada projects are implemented with a funding of Ph2.5 billion, the average survival rate at the elementary level was 67.18% while the secondary level posted 73.05%. Whereas, during the implementation of the Kalahi-CIDDS with its Ph9.37 billion fund, the survival rate at the elementary level was 68.89% while the secondary level had 58.25%. These figures indicate disparity in the financial efficiency of the projects especially in the aspect of providing basic education to the poorest population. Although the government is spending so much to alleviate domestic deprivation among its constituents, it appears that some programs do not go beyond meeting the fundamental necessities of a household to include basic education despite the relatively big funding.

Should students survive basic education and eventually complete tertiary education, the next big question is whether their degrees match the immediate labor demands in their locality thereby contributing to the income inflow. To answer the question, the link between the development needs and the human resources of the poor regions of the country was also investigated in this study. The review of the 2004-2010 Regional Development Plans of the poor localities yielded the information that the regions under study had varying thrusts. In Luzon, the Cordillera Autonomous Region focused on good governance, social development, indigenous culture and knowledge, physical integration, watershed cradle and balanced ecosystem, hydropower production, eco-tourism, greens and ornamental grocer,

education, and development of knowledge-based industries. The development framework of the Bicol Region in Visayas centered on economic growth and job creation, energy sufficiency, social justice and basic needs, education and youth opportunity, and anti-corruption and good governance. On the other hand, CARAGA in Mindanao prioritized job creation and economic growth, social development and direct anti-poverty measures, physical planning and sustainable management of environment, infrastructure development and logistic support, and good governance. It is in the context of these development goals that the three regions produced their human capital resources as shown in Table 7 (See Appendix G).

The data in Table 8 imply that, to a certain extent, the available human resources in Bicol and CARAGA match with the labor force required by the local government based on its developmental plan. Conversely, the Cordillera Autonomous Region seems to be producing professionals who do not necessarily meet the demands as indicated by the r value of -0.340. However, the fact that all three remains to be poor despite these differing scenarios reveals some implications. While Bicol and CARAGA regions seem to be producing the needed manpower, there may not be enough jobs for this potential workforce. The Cordillera Autonomous Region, on the other hand, is producing more than enough manpower but the job preparations of these graduates may not relate to the developmental priorities of the LGU. The problem of the regions under study verges on the quality and quantity of their workforce as produced by the higher education institutions. Hence, the higher education institutions in these regions may need to review their programs to effectively respond to the goals that the LGU has envisioned itself to achieve.

Conclusions

Based on the findings of the study, the following conclusions were derived:

1. The family's financial capability accounts for the survival of the students at the elementary level. However, as the individual progresses to the secondary level, his/her sense of resourcefulness and personal motivation to succeed are crucial to his/her drive to finish education.
2. Mechanisms for job generation need to be reviewed by the local government units to ensure that local graduates will have access to gainful employment upon graduation.
3. The quantity and quality of human resources are strong determinants of poverty mitigation. Therefore there is a need to empower the individuals through relevant education and well targeted skills development mechanisms to promote one's economic self-sufficiency.

Recommendations

The outcome of this study led to the formulation of the following recommendations:

1. LGUs must ensure that anti-poverty programs reach the truly poor and needy;
2. LGUs need to give greater consideration on how the social assistance mechanisms implemented in the locality impact the students in basic education;
3. LGUs need to allow greater participation among higher education institutions in the crafting of the developmental agenda of the local government to determine the human resource requirements of the programs;
4. Educational institutions must strengthen its coordination with the LGUs to further establish the relevance of their program offerings; and

5. Continued monitoring on the responsiveness of the course offerings be employed by the higher education institutions to enable the graduates to achieve the desired level of productivity.

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APPENDIX A

Table 1
Cohort Survival Rate in Public Elementary Schools

Region	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Average
NCR	80.12	79.04	79.41	75.15	74.73	73.59	89.71	75.50	77.88	78.35
CAR	65.95	65.82	68.41	63.60	60.75	57.09	76.38	63.67	61.63	64.81
I	80.56	80.66	86.66	76.98	77.13	80.88	82.84	79.07	79.69	72.50
II	69.89	70.78	77.77	70.80	69.77	67.52	79.54	70.64	70.01	71.86
III	79.51	79.15	79.51	72.37	73.51	71.89	83.75	73.69	72.94	76.26
IV-A	74.40	76.88	73.99	66.76	67.96	65.71	83.22	67.02	68.00	71.54
IV-B			69.19	60.75	63.05	59.26	72.24	62.08	60.84	63.92
V	66.38	69.05	72.60	68.05	68.98	63.60	75.28	67.29	65.70	68.55
VI	63.93	61.76	62.66	60.10	59.75	58.51	73.77	64.72	62.45	63.07
VII	68.43	65.31	67.88	62.53	61.25	59.59	79.33	69.52	68.43	66.92
VIII	57.91	60.94	65.45	61.54	62.28	54.05	67.03	65.17	61.65	61.78
IX	50.71	45.51	61.56	58.06	58.21	57.74	59.96	60.92	60.68	57.04
X	61.62	62.61	68.00	63.61	55.90	55.24	67.45	60.94	59.03	61.6
XI	61.13	63.17	69.87	62.81	64.23	54.08	59.15	60.54	55.07	61.12
XII	55.58	56.45	54.04	47.43	47.36	45.62	64.84	51.69	51.1	52.68
CARAGA	62.02	61.88	61.85	61.92	56.59	63.16	65.6	66.46	63.64	62.57
ARMM	33.62	33.96	48.10	37.02			33.9	43.17	42.73	38.29
Philippines	**67.18**	**67.13**	**69.80**	**63.57**	**64.87**	**62.58**	73.43	65.65	77.88	68.01

Table 2
Cohort Survival Rate in Secondary Schools

Region	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Average
NCR	75.56	72.56	63.41	61.40	66.73	60.82	78.20	64.09	69.65	68.05
CAR	77.25	75.26	85.43	62.42	62.19	54.95	83.69	58.11	64.23	69.28
I	78.30	78.28	76.49	69.24	68.70	69.94	84.19	72.09	69.04	74.03
II	77.90	78.75	64.83	64.96	60.29	60.15	80.66	66.12	69.74	69.27
III	76.23	75.92	64.38	59.24	64.75	59.96	80.35	63.50	64.95	67.70
IV-A	78.05	76.63	65.34	60.62	62.23	58.57	85.43	58.86	58.98	67.19
IV-B			69.84	60.47	59.15	50.49	77.21	62.57	61.93	63.09
V	71.73	71.10	65.05	61.86	59.15	52.90	76.36	63.03	62.17	64.82
VI	68.01	76.38	68.53	61.56	61.97	55.78	76.59	62.29	60.57	65.74
VII	74.41	72.98	64.74	58.12	61.93	41.80	73.56	62.13	55.40	62.79
VIII	64.99	66.69	69.52	60.10	67.23	57.34	73.36	67.22	63.62	65.56
IX	62.38	64.44	65.57	65.10	56.85	55.20	75.46	58.44	59.83	62.59
X	67.55	69.08	58.22	57.91	54.23	48.68	72.40	55.12	56.59	59.98
XI	70.28	63.04	58.79	51.84	51.91	44.50	68.44	53.52	49.98	56.92
XII	67.39	85.97	63.21	52.91	49.21	43.60	73.10	56.98	53.14	60.61
CARAGA	70.58	67.23	65.09	60.26	63.09	52.44	73.76	67.26	65.09	64.98
ARMM	64.07	71.13	75.20	60.29			41.26	44.86	78.38	62.17
Philippines	**73.05**	**73.16**	**65.84**	**60.41**	**61.33**	**54.99**	77.33	61.50	62.14	65.52

APPENDIX D

Table 4
Correlation between the Cohort Survival Rate and the Poverty Incidence

Variables	r value	Description
Cohort Survival Rate (Elem) with Poverty Incidence by Families	-0.79409	Strong negative linear correlation
Cohort Survival Rate (Elem) with Poverty Incidence by Population	-0.77308	Strong negative linear correlation
Cohort Survival Rate (Sec) with Poverty Incidence by Families	-0.44721	Moderate negative linear correlation
Cohort Survival Rate (Sec) with Poverty Incidence by Population	-0.44084	Moderate negative linear correlation

APPENDIX E

Table 5
The Philippine Government's Initiatives to Address Poverty

Administration	Project	Project Focus	Budget	Outcome
Ramos	Social Reform Agenda	Agricultural development; Fisheries and aquatic resources management; Ancestral domains; Socialized housing; Comprehensive and integrated delivery of social services; Worker's welfare and protection; Livelihood; Credit; Institution-building and effective participation in governance	4,100 million (1996) 2,000 million (1997) 2,500 million (1998)	Dropped after Ramos's term
Estrada	Lingap Para sa Mahirap	Medical assistance; Livelihood; Socialized housing; Potable water supply; Food subsidy; Protective programs/services for the poor	P2.5 billion	Not fully implemented due to some weaknesses of the program
Arroyo	Kapit-Bisig Laban sa Kahirapan (KALAHI)	Asset reform; Human development services; employment and livelihood; Participation in governance of basic sectors; Social protection and security against violence.	P70 million to pilot test the project To have been funded by: World Bank – P5.1 billion; Government counterpart P1.6 billion; and LGUs – 2.6 billion	No data
Aquino	4 Ps	Medical Care for pregnant women; Attendance to responsible parenthood sessions; Regular preventive health check-ups and vaccines for children; Attendance to daycare centers; Enrollment in basic education; provision of deworming pills	22 billion ($1.2 billion but ADB just recently approved $400 million for implementation up 2014)	Monitoring in progress

APPENDIX F

Table 6

Government Investments in Poverty Alleviation Projects and Their Impact on Basic Education

Administration	Poverty Alleviation Project	Investment	Cohort Survival in Elementary	Cohort Survival in Secondary
Ramos	SRA	P8.6 billion		
Estrada	Lingap Para sa Mahirap	P2.5 billion	67.18%	73.05%
Arroyo	Kalahi-CIDDS	P80 billion	68.89%	58.25%
Aquino	4 Ps	P22 billion		

APPENDIX G

Table 7

Development Needs and Human Capital Production of Poor Regions in the Philippines

Region	Development Needs	Related Discipline Groups	Number of Graduates(1997-2004)	Total	Average	Rank
CAR	Good Governance	Laws and Jurisprudence	1093	1093	156	8
	Social Development	Medical and Allied; Agricultural, Forestry, and Fisheries; Home Economics	9462 3550 694	13,706	714	4
	Indigenous Culture and Knowledge	Social and Behavioral Sciences; Humanities; Religion and Theology	3431 1383 186	5,000	2149	5
	Physical Integration	Engineering and Technology; IT Related Discipline	9221 5819	15,040	374	3
	Watershed Cradle and Balanced Ecosystem		-			9.5
	Hydropower Production		-			9.5
	Eco Tourism	Architectural and Town Planning; Service Trades; Fine and Applied Arts; Mass Communication and Documentation	481 484 29 1622	2,616	374	6
	Greens and Ornamental Grocer	Natural Science	1536	1536	219	7
	Education	Education and Teacher Training; Mathematics and Computer Science	18,685 6,259	24,944	3563	1
	Knowledge-Based Industries	Trade, Craft and Industries; Business Adm and Related Fields	29 20,947	20,947	2992	2

Table 7
cont'd…

Bicol Region	Economic Growth and Job Creation	Agricultural, Forestry, and Fisheries;	6582	77,963	11138	1
		Architectural and Town Planning;	871			
		Business Administration and Related Fields;	33,452			
		Engineering and Technology;	16,870			
		Service Trades;	276			
		Trade, Craft and Industrial;	782			
		IT Related Discipline;	8905			
		Mathematics and Computer Science;	9351			
		Mass Communication and Documentation	874			
	Energy	Natural Science (?)	968	968	138	4
	Social Justice and Basic Needs	Home Economics;	45	13,985	1998	3
		Medical and Allied;	9,397			
		Social and Behavioral Sciences	4,543			
	Education and Youth Opportunity	Education and Teacher Training;	33,658	39,786	5684	2
		Maritime Education	6,128			
	Anti-Corruption and Good Governance	Law and Jurisprudence	1,060	1,060	151	5
CARAGA	Job Creation and Economic Growth	Agricultural, Forestry and Fisheries;	2,286	18,584	2654	1
		Business Administration and Related Fields;	12,387			
		Trade, Craft and Industrial;	68			
		Mathematics and Computer Science	3843			
	Social Development and Direct Anti-Poverty Measures	Maritime Education;	1,727	18,498	2642	2
		Education and Teacher Training;	14,455			
		Medical and Allied;	1,938			
		Social and Behavioral Sciences;	378			
	Physical Planning and Sustainable Management of Environment	Natural Sciences;	5	111	16	4
		Architectural and Town Planning	106			
	Infrastructure Development and Logistic Support	Engineering and Technology;	4,220	8,826	1261	3
		Mass Communication and Documentation;	600			
		IT Related Discipline	4,006			
	Good Governance	Law and Jurisprudence	56	56	8	5

APPENDIX H

Table 8
Correlation of the Development Needs and Human Capital Production of the Poor Regions in the Philippines

Region	Correlation Coefficient	P value	Description
Cordillera Autonomous Region	-0.340	0.336	Low correlation
Bicol Region	0.600	0.285	Moderate Correlation
CARAGA	0.900	0.037	Strong Correlation