

# Vocational and Technical training for rural laborers in northern midland and mountainous area of Vietnam

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**Abstract-** For every country, human resource is a main power for country development. Vietnam is an agricultural developing country, rural labor force accounts for the majority of the whole country labor force. Rural human resource development is a compelling need to ensure Vietnam economy development speed, especially for northern midland and mountainous area, where there are special geographical characteristics and social. Economic condition is backward and lower compared to the average condition of whole country. Northern midland and mountainous area has special geographical characteristics with limited traffic structure, backward social, economic condition and low qualified rural human resource. These difficulties lead education programs implemented in this area be not effective as expected, especially for rural laborers in the countryside. Improving quality of rural labors can help them to increase their income, improve quality of life and also promote rural sustainable development. It is necessary to find some education models that can meet the requirements of this area condition by studying on the general education programs, vocational and technical training programs supported by the government. Finding out the causes of education programs' limitations and disadvantages to propose solutions for this area. A study on the experiences lesson absorbing from the failures of vocational and technical training programs supported by the government, and the success experiences of vocational and technical training programs implemented by local government and Non-Government organizations is also carried out to find out suitable education modals for rural human resource development in this area. The course organizing and curriculum building, teachers and instructors recruitment, financial and capital support solutions are proposed in this article.

**Index Terms-** human resource, vocational and technical training, non-formal education, rural laborer, northern of Vietnam.

## I. INTRODUCTION

Northern midland and mountainous area of Vietnam is a special geographical area, traffic condition is not convenient, but this area contains a lot of nature valuable and rare mineral resources such as rare earth, iron, coal, copper, nickel, tin, lead, bauxite, gold and apatite resources, however the highland geographical condition makes it difficult to mine. The northern midland and mountainous area of Vietnam also has a large primeval forest, as well as highlands and large pastures.

Nearly 40 years after the country's reunification, the economics of this area is underdeveloped with limited human and social capital (including low educational and vocational skill levels, poor social networks, and the shortage of information and skills to adapt to changes in working and living environment), peasants still use the ancient methods of farming, rudimentary farming tools and technology that used thousands years ago, such as oxen-plough technology, or calculating seeding time based on the experience passed from generation to generation. The rural labor force in this area has not really qualified, most of laborers have low education levels and have not been trained. Education programs formally provided to people in this area do not meet the requirements of most people and expose shortcomings. However the number of laborers at working age in this area is abundant, most of labor force that supports urban areas and industrial zones come from this area.

In recent years government of Vietnam has carried out some formal vocational and technical training programs to improve quality of rural laborers. However these programs have not got enough efficiency as expected. The quality and quantity of trained laborers has not improved as expected. Current formal education or vocational and technical training programs implemented in this area are unable to serve with the requirement of the rural industrialization and modernization program. Investment in rural labor vocational training for the northern midland and mountainous area is not only to improve this area economic development but also improve the whole Vietnam economic development as well. It is necessary to find a long term and accordant vocational training program to deploy in this area.

## II. OBJECTIVES

1. To find out limitations of general education, Vocational and technical education programs in northern midland and mountainous area of Vietnam.
2. To propose suitable vocational and technical education models for this area, with solutions for building programs, organizing course and setting up curriculum, recruiting teachers and instructors and solution for financial and capital support.

## III. THE CURENT PROBLEMSOF THIS AREA

### 3.1 Low quality of rural laborers

Northern midland and mountainous area is the biggest area of Vietnam. As the census results in2009 of General Statistics Office (GSO) of Vietnam shows that the area accounts about 28.8% of the country area and 12.9% of country

population. Population in that area is mainly ethnic minority groups with 50 to 100 people per one square kilometer as population density (GSO. 2009). The Report on Labor force survey in 2012 of GSO reveals that 75.9 % of population in the northern midland and mountainous area resided in rural area, 14.7% of population aged 15 and over is illiterate, 22.7% does not finish primary level, and 25.6% just finishes primary level. Percentage of technical trained people is also low with 89.98% of people at workable age is not trained, 2.54% obtains elementary vocational level, 4.5% obtains intermediate vocational level, 1.65% has college diploma, and 1.33% has university or higher diploma (GSO. 2012). Low qualified of laborer and difficult transportation in this area does not attract industrial enterprises to establish in this area that leads to limit economics development and employment requirement as well.

**3.2 Barriers affect achievements of education programs in this area.**

***The barriers of General education***

*The financial barrier* : Vietnam implements six years compulsory education policy. Primary education is compulsory and it is free for all children, but in Vietnam the cost of education is not only school tuition fee but also other expenses such as; learning materials, uniforms or clothing, transport, additional living expenses, extra learning fee, school construction fee, and other unnamed expenses. A study showed that Vietnam is one of the countries in Asia that mobilizes the highest resource from society for education. The studies calculated in 2006, the education expenses accounted 41% of total social expenses. A survey result in this study showed that 57% of parents said that their children’s education expenses were “high”, 38% of parents said “relatively high”, and 18% of parents said “very high”(Tran Huu Quang, 2008). Socialized education policy of the government makes education expenses to be a burden of families whose children go to school. For this reason compulsory education is just a “formalism policy”, in fact, children especially children in rural areas do not get full preferences of this policy. High education expenses prevent rural children from continuing to attend higher education, prompting them to leave school early to participate in agricultural activities. The high dropout rate leads to increase the rate of low educated laborers.

*The geographical, social and cultural barrier*: In rural area one school serves a larger geographic area that because distribution of schools is based on population density. Far distances from home to school, difficult transportation condition, so most of pupils must reside in school, or school vicinity, particularly in some places pupils reside in temporary tents. The formal education programs are fixed schedule, and does not run in synch with the agricultural crops season, so many pupils leave school to participate in harvesting crops or planting new crops, while children start to work at early age, most of children in rural area after school they take part in harvesting crops, planting new crops or working to earn small income to support their families. For this reason, pupils find it is difficult for them to enroll in full time schooling as most of urban children do. In rural area people also get married at early age, as invested result show that 18.6% of people at the age of 12 to 19 get married (GSO. 2012). The fertility birth rate is high and close so the elder children often

leave school to work to support their brothers or sisters to continue school

*The language barrier*: In northern midland and mountainous area, majority of people are ethnic minorities groups so many pupils face language barrier when they are at school because the language used in these schools is Vietnamese, which is not the home language for some ethnic pupils. Not many teachers in ethnic areas can speak the ethnic language of the pupils and this makes it difficult for them in communicating with, as well as in teaching ethnic students.

***The barriers of Vocational and Technical Education***

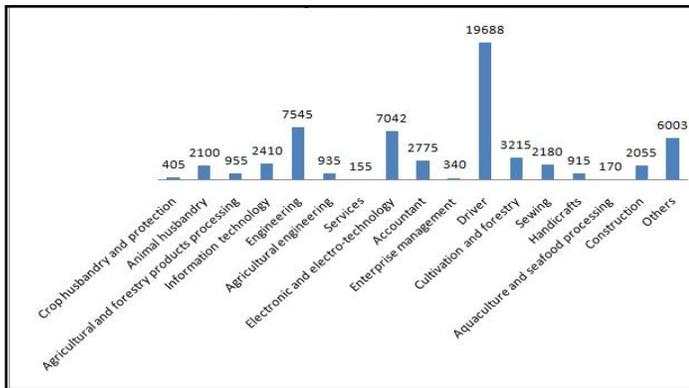
Vocational and Technical training schools and centers are located in urban areas, far away from countryside, so most of learners must reside in schools, or schools vicinity. Training courses are developed by time – based approach so they are not flexible enough to meet agricultural crops season as well.

Expenses of formal Vocational and Technical programs are also burdens for most rural laborers to decide to enroll vocational training courses. As investigated 30 vocational training schools and centers in Thai Nguyen province in 2012. Each learner needed to pay average 664 USD for a semester (6 months). The largest expense was expenses for food and daily life, occupied for more than half of total expense. These expenses were increased because of the independent lives of expenses. If they lived with their families they would reduce travelling and communicating expenses, and in rural area most of daily food and necessities could be also reduced by self – sufficiency.

***Table1: The average expenses of vocational training in northern midland and mountainous area of Vietnam***

<b>Expense</b>	<b>Average (USD)</b>
School fees	105
Dormitory fees	41
Average food expenses	327
Materials and book	15
Extra - Learning fees	18
Membership fees (Young union, Student union...)	12
Physical test and insurance	10
Daily life expenses, travelling, communication, etc.	136
<b>Total</b>	<b>664</b>

The distribution of careers of vocational and technical training schools is unreasonable. As investigated more than 40 vocational training schools in 15 provinces of northern midland and mountainous area shows that 58% of career quota are engineering - welding and fabrication, electric technology, electronics technology, automotive mechanical technology, information technology and driver. Only 12.3% of career quota is agricultural careers. For the diplomat level, agricultural careers occupy 9.3% of the quota, and for secondary level agricultural careers account for a small number of quota, 10.8%. Diploma and secondary level requires trainees obtain at least secondary graduation certificate before enroll.



**Figure1: Career quotas distribution**

Rural labors can enroll to study elementary level; however the number of agricultural careers are only 15% of career quota, and agricultural careers are not deployed on a large scale, but only available in some agricultural schools located in some certain provinces.

Law on Vocational and Technical training issued in 2006, defined that vocational and technical training includes three levels: vocational elementary level, vocational secondary level, and vocational diploma. Vocational training includes full-time and regular training. The secondary, and vocational diploma levels limit to those who have graduated from secondary schools, so the law has hindered most of rural laborers to enroll formal vocational training programs, because 14.7% of rural laborers aged 15 and older in this area are illiterate, 22.7% ungraduated primary level, 25.6% finished primary level (GSO. 2012). It means 63% of rural laborers can only enroll in elementary training level and cannot enroll to higher level at formal vocational schools or centers because of their education certificates limitation as the law regulations.

**The main problems of education programs in this area**

- Curriculums are inflexible and in conflict with agricultural crop, duration of curriculums is long and trainers misspend on unnecessary subjects.
- Far distances from home to school, difficult transportation condition.
- Lacking of training, learning facilities and equipment, non financial support or little financial support from the government does not ensure learning and teaching condition for learners.
- Social - cultural gap, language barrier and high education expense.
- The investigation and survey activities are not exact and detail in identifying skills with unclear training target leads the training vocation does not meet the requirements of laborers.
- The input certification requirement prevents most of laborers to participate in higher training levels.
- The propaganda and consultant activities are limited and passive.
- The abilities of local officials are limited and the coordination of local departments for implementation of training program is weak.

**IV. SOME SOLUTIONS FOR THESE PROBLEMS**

**4.1 Building non-formal Vocational and Technical training models for this area**

General education will create “general human capital”, and Vocational and Technical Education will create “specific human capital” (Becker.1985). Vocational and Technical Education can meet changes in production technology; these changes go along with advanced technology development. The development of advanced technology will require skilled and qualified workers.

For major rural laborers in this area, general education seems not be suitable to improve their human capital. Because of the low qualified educational levels of rural laborers, general education makes rural laborers spend long time to achieve a degree while vocational and technical training will equip them what knowledge and skills that they require in short time. Vocational and technical training can reduce unemployment, and help rural laborers for self-employment. The trained laborers can open and operate their own, or their families workshop so they will create new employments. and Vocational and technical training will also promote “equity with a rural bias and serve the needs of relatively poor people”, create “skill culture”, as opposed to “academic culture” that is now prevailing in Vietnam, as the majority of pupils after high school graduation will participate an exam to enter colleges and universities with a dream to find a high income office job in city after graduation (Jandhyala B G Tilak. 2002).

Non-formal education is distinct from formal education, it is flexible, it can be customized to serve for specific learner groups with particular purpose. Non-formal vocational and technical training programs can be customized in a way that the course will be organized in their villages, or next to their homes, practicing can be applied in their daily work. Learners can choose what they learn in detail, and class time can be scheduled in spare time, so it will not affect or will have small effect on their harvesting. Let rural laborers take the initiative in education with flexible time and courses. They will not face difficulties in communicating or feel a complex about their over age. Finally learning expenses will not be their burden on themselves or their families.

**4.2 Organizing course and setting up non-formal vocational and technical training curriculum**

Non-formal vocational and technical training curriculum: Setting up sensible curriculums for rural laborers and attracting learners are very important for the success of programs. It is necessary to investigate and survey before setting up a curriculum. The investigation and survey activities are not exact and detail in identifying skills with unclear training purpose that leads the training programs do not meet the requirements of laborers. For northern midland and mountainous area with the particular social economic condition, curriculums should more focus on careers that can develop this area economics. The curriculum should put learners at the center of training activities, and let them take more roles on teaching and learning activities. After class learners can practice their knowledge immediately in daily life and teaching should be done in local language by local teachers (ILO.2002).

To set up a suitable curriculum, it is necessary to identify what knowledge and skills that rural laborers should be

equipped. The knowledge and skills that near by labor market needs is prior. The knowledge and skills about agricultural careers, agriculture production processing, marketing, management, information technology should also equip to rural laborers as they can improve their productivities or they can be self-employed or be agri- entrepreneurs. When rural laborers can self-employ they can also create employment for their families members or other people, and when they can process their agricultural products they may establish small agricultural products processing establishments and also create new employments. Self-employment, establishing agricultural products processing establishments and becoming agri-entrepreneurs will create new employments, new services in localities and improve local economics.

The curriculum must have the community at the centre of the decision making process – identifying a range of skills that they see appropriate and fit with the sources of growth and job opportunities within the locality. Curriculums should be built to support for rural laborers more than the elementary training level to equip rural laborers with enough knowledge and skills to self-employ or work in factories. Laborers can learn whole curriculum or a part of curriculum then enter labor market or start their own work, if they want to improve their skills they can attend the curriculum again. It should be a long – life curriculum. Preparing and organizing the curriculum: Curriculum organizing should fit the condition of rural laborers, all of the curriculum or a part of it should be taught in villages where learners reside. A vocational and technical training curriculum combines of two parts, theoretical part and practical part. Almost theoretical parts can be taught in localities but some practical modules require practice facilities or machines that are unable to be moved to localities, expensive moving cost, or unable to be installed in localities because of power supply limitation. For these cases the following methods can be used; Practicing associated with manufacturing in firms is an impeccable method for learners practice and make real production. Learners are practicing in real manufacturing environment that help them to have industrial manners. Learners can be paid amount of salaries to cover their expenses, and it also creates chance of employment for them after graduation. Course organizers can associate practice courses with surrounding vocational and technical training schools to help learners practice in these schools in free time such as weekend, summer vacation etc. Vocational and technical training schools are well equipped with facilities and machines, teachers and instructors are experienced and well professional. Maybe learners need to pay some extra expenses, however they can have better practicing environment. Curriculum should be organized in flexible schedule. Teaching may be scheduled for only part of a day, after working time, in evening, after harvest time, or for the weather day that people are unable to work outside in field

Attracting learners is one of the formal education failures so it could not attract learners to attend class. For northern midland and mountainous area, propaganda, investigation and survey activities should be improved. These activities can be carried out by local social political organizations available in rural area such as: Ho Chi Minh Communist Youth Union, Vietnam Youth Federation, Vietnam Women's Union, Vietnam farmer's Union, Study Encouragement Society, Agricultural Extension ... etc. Almost rural laborers participate in

at least one of these organizations so these organizations can understand condition of rural laborers, and rural laborers can be directly fed propaganda. These organizations can create vocational learning movements for rural laborers like other political movements popularized in rural area. These organizations can investigate or do surveys about local rural laborers to prepare for training courses. These organizations can also carry out propaganda activities and enrolment activities as well.

In rural area people keep their family relationships and clan connections closely, in each clan the role of matriarch or patriarch is very important, and some clans have their own rules. Big families or clans can be considered as organizations. We can mobilize them to participate in propaganda activities, enrollment activities to their members. Taking advance of the local organizations and local governments we can attract rural laborers to attend class more effective and more economic saving.

The training programs should be associated with local organizations' activities to prove good effect, and reduce expenses. The programs should also exploit local tradition culture and family relationship to attract learners. Using public facilities to reduce expenses and mobilizing finance from social organizations to supply scholarship to learners will ensure them to attend class.

#### **4.3 Teachers and instructors**

In the northern midland and mountainous area, the geographical and social economic condition is difficult; traffic is limited, especially for some remote localities, so it is not attractive for teachers to come for sustainable employment. For professional and experienced teachers, it is more difficult to recruit.

To recruit teachers, wage and bonus will not be the condition to attract teachers. The policy of vocational training for rural area can be treated as social policy; teachers can be volunteered for short-term. Graduated students will be a source of voluntary teachers. Graduated students can accept to work in rural area few years before move to good condition area. Surrounding vocational and technical training schools' teachers can also be a suitable voluntary source. They can take apart in rural courses in their free time, like weekend or vacation. Another source of voluntary teachers is retired teachers, the teachers are experienced and professional, they also are ensured by retirement pension, so wage will not be pressure for their work, and they have full time for their work. High skilled technicians of local agricultural expansion encouragement society or craftsman from trade villages, skilled workers can also recruited as instructors. Local teachers and instructors will be the first choice because they are familiar with local conditions, they also can communicate with learners in local languages, and the expenses (such as traveling expense, accommodation expense ... etc) for them will be less than expenses for teachers from other places.

#### **4.3 Financial and capital support**

Finance for non-formal vocational and technical training programs includes teacher wage and pension, organizing cost (includes preparing expenses such as investigations, propaganda activities. etc), teaching and learning facilities, equipments, materials, machines, workshops, building, power, scholarship. Government should be the main sponsor provides financial

resource to these programs, and vocational training for rural labors should be put as a nation policy, especially for the northern midland and mountainous area, vocational training for rural labors policy can narrow economic gap with other areas as the policy that government of Vietnam are performing.

Local governments should provide financial support to these programs, because the success of these programs will improve local economics and social environment condition. Though local governments' financial resources are plentiful, they can support to vocational training programs by other resources like electric power, practice materials or learning facilities...etc. Enterprises when invest in rural area they should also invest in human resource. If they want to have high skilled laborers they should invest in human resource development by themselves or recruit high skilled laborers. In rural area high skilled laborers are not available for recruitment, for this reason, it is better for enterprises to invest in vocational training for rural labors in localities where they locate in. If enterprises using raw materials from local agricultural products for their production, investing in vocational training for rural laborers who produce and support agricultural products as raw material resources to enterprises will also improve the quality and productivity of raw material resources. This policy will bring benefit to both enterprises and labors, rural labors will reap more quantity and better quality agricultural product, and enterprises will be supplied with stable and good quality material resources.

Financial contributions can be donated from interior and international sponsors such as social organizations, international organizations, and non-governmental organizations. The credit loans from international organizations will be another financial resource supported for these programs. The donation finance in Vietnam from NGOs is difficult because of the politic of Vietnam, these organizations are limited in implementation their activities, so they find difficult to take a part in development of Vietnam economics. If government of Vietnam loosens religions control, it can mobilize big resources from these organizations support for economic development.

Self - created finance is finance created by learning associated with manufacturing, such as the expanding handicraft and trade villages programs, learners could make commercial products while they were learning. The finance will support learners daily lives to maintain the courses and for next higher courses.

Finance expenses can be reduced by using public facilities available in localities, such as commune post-culture houses, culture houses, libraries, village halls in teaching and learning activities. In the northern midland and mountainous area as an investigation result of General Statistics Office (GSO), there are 1904 post-culture houses about 83.84% communes, 716 culture houses, about 31.53% communes, 139 public libraries about 6.12% communes. And others village halls and community houses of clans, these places can be used as classrooms with little equipped.

Teacher wage and pension can also be reduced by recruiting retired teachers, short- term teachers and voluntary teachers. Investigations, propaganda, enrolment activities carried out by local organizations can reduce significant amount of organizing expenses.

## V. CONCLUSION

The solutions will be more effective if rural laborers are ensured by law to improve their skills and knowledge, so it is necessary to build a law on non-formal vocational and technical training to give non-formal vocational and technical training organizations permission to train higher training levels and award higher training levels certificates. The present vocational and technical training law provisions that the higher training levels (secondary training level and diplomat training level) that required for at least secondary school graduation. The only secondary vocational schools, vocational colleges, professional secondary schools, colleges and universities who have registered to provide vocational training at the secondary level are allowed to provide higher training level. It is necessary to develop a vocational qualification evaluating system with the regulations to admit the certificates of non-formal vocational training programs to be equivalent with other vocational training certificates, and to allow laborers to participate in the highest vocational training level as they can.

As well as supporting vocational and technical training for rural labors, laborers recruitment and employment policies should be deployed simultaneously to ensure laborers after graduated can find a wage employment or self-employ. Developing small enterprises or family establishments is a suitable way to employ laborers and develop local economics. Small enterprises and family establishments easily to adapt to economic changes, market requirements, producing technology change. They can be established in rural area use local labors and materials. The government can make policy provide financial support or preferential tax policy to develop small enterprises in rural area. Linking vocational training with enterprises is a way to solve trained laborers. In Vietnam most of labors must find employment by themselves or 'implore for a job', sometime they must pay amount of money for employers to get a job. If vocational training centers can be linked with enterprises to establish a 'channels laborer distribution' with clear information of human resource, laborers will have more employment chances and response requirement of labor market better.

It is important to change misconception of vocational and technical training and learning. A lot of Vietnamese people regard academic education and disregard vocational education, and "qualification above ability" conception is popular in Vietnam. To change misconception, the propaganda activities should be direct to rural labors; vocational training should be brought directly to rural labors. When people realize that vocational training can increase their labor productivities, increase income and improve their lives they will change their misconception.

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