



UvA-DARE (Digital Academic Repository)

Rural youth employment in developing countries: a global view

van der Geest, K.

Publication date

2010

Document Version

Final published version

[Link to publication](#)

Citation for published version (APA):

van der Geest, K. (2010). *Rural youth employment in developing countries: a global view*. (Overview/Synthesis; No. 1). FAO. <http://www.fao.org/docrep/012/a1414e/a1414e00.pdf>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



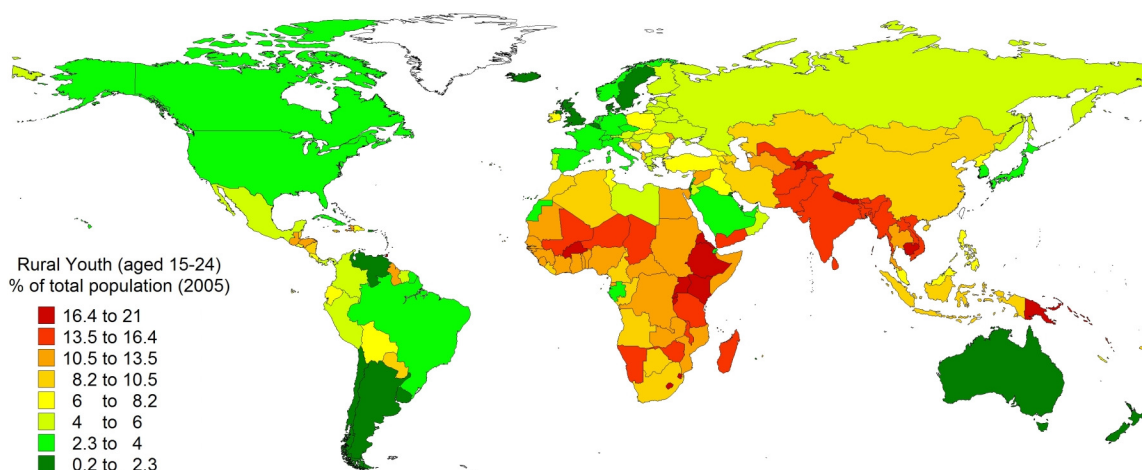
OVERVIEW/SYNTHESIS #1

Rural Youth Employment in Developing Countries: A Global View

Rural Youth Employment in Developing Countries: A Global View

Kees van der Geest

March 2010



Author's contact:

Kees van der Geest
University of Amsterdam
Nieuwe Prinsengracht 130
1018 VZ Amsterdam
The Netherlands
E-mail: geest@uva.nl

FAO contact:

Gender, Equity and Rural Employment Division
Food and Agriculture Organization
of the United Nations (FAO)
Viale delle Terme di Caracalla
00153 Rome Italy

Contents

List of figures	3
List of maps	4
List of tables	5
1. Introduction	6
2. Global Data	7
2.1. Rural Youth	7
2.2 Agricultural Youth	10
2.3 Occupation	14
2.3.1 Unemployment	14
2.3.2 Labour Force Participation	18
2.3.3 School Attendance	21
2.3.4 Involvement in Child Care	24
2.4 Underemployment	27
2.5 Quality of Employment	29
2.6 Quality of Employment in Agriculture	31
2.6.1 Agricultural Productivity	32
2.6.2 Constraints to Agricultural Productivity Growth	33
2.7 Non-Agricultural Employment	37
2.8 Poverty	38
3. Case Study: Nicaragua	40
4. Conclusions	44
Acknowledgements	46
References	46
Online data sources	47

List of figures

Figure 1: Rural youth as % of total population by sub-region (1950-2050)	8
Figure 2: Total number of rural youth by sub-region (1950-2050).....	9
Figure 3: Youth unemployment by sub-region (1998-2008)	15
Figure 4: Secondary school enrolment by sub-region (1991-2006).....	22
Figure 5: Tertiary education enrolment by sub-region (1991-2006).....	23
Figure 6: Total fertility rates by sub-region (1960-2007)	25
Figure 7: Adolescent fertility by sub-region (1997-2007)	26
Figure 8: Weekly working hours of youth in eight countries (2004).....	28
Figure 9: Weekly working hours of youth and adults in eight countries (2004).....	29
Figure 10: Vulnerable employment rates by sub-region (1998-2008).....	31
Figure 11: Agricultural productivity by sub-region (1990-2006)	32
Figure 12: Rural population per square kilometre of arable land (1961-2005).....	34
Figure 13: Fertilizer utilization by sub-region (1961-2005)	36
Figure 14: Contribution of agriculture to GDP by sub-region (1960-2007)	37
Figure 15: Proportion of population living on less than 2 US\$ per day, 1981-2005	39

List of maps

Map 1: Rural youth as % of total population (2005).....	10
Map 2: Agricultural population as % of total population (2010).....	11
Map 3: Evolution of agricultural population as % of total population (1950-2010).....	12
Map 4: Agricultural population as % of rural population (2010).....	13
Map 5: Evolution of agricultural population as % of rural population (1950-2010)	13
Map 6: Youth unemployment rates	16
Map 7: Adult unemployment rates	16
Map 8: Youth - adult unemployment gap.	17
Map 9: Rural youth unemployment rates	17
Map 10: Urban youth unemployment rates.....	18
Map 11: Youth labour force participation rates	19
Map 12: Young women labour force participation rates.....	19
Map 13: Young men labour force participation rates	19
Map 14: Youth not in labour force not in school.	20
Map 15: Young women not in labour force not in school	21
Map 16: Young men not in labour force not in school	21
Map 17: Net secondary school enrolment (2003-2007).....	23
Map 18: Gross enrolment tertiary education (2003-2007).....	24
Map 19: Total fertility rates (2007).....	27
Map 20: Adolescent fertility rates (2006)	27
Map 21: Agricultural productivity (2004-2006)	33
Map 22: Rural population per square kilometre of arable land (2004)	35
Map 23: Trend in rural population per square kilometre of arable land (1960-2004)	35
Map 24: Fertiliser use (average 2001-2005)	36
Map 25: Contribution of agriculture to GDP (2003-2007)	38
Map 26: Proportion of population living on less than 2 US dollars per day.....	39
Map 27: Rural-urban poverty gap	39

List of tables

Note: All tables in this paper are based on Nicaragua's Living Standard Measurement Survey of 2001. The tables are disaggregated according to age group, locality and gender.

Table 1: Proportion of people that worked in past week (N=12,177).....	41
Table 2: Proportion of people that looked for work in the past week (N=4,798)	41
Table 3: Reasons why unemployed people did not look for work (N=4,523).....	42
Table 4: Reasons why last job ended (N=1,691)	43
Table 5: Employment status (N=7,324)	43
Table 6: Social security membership (N=7,324)	44

1. Introduction

The aim of this paper is to assess the availability of statistical data that are useful to researchers and policy makers dealing with rural youth employment in developing countries, and to present a first analysis of these data. The paper was commissioned by the Gender, Equity and Rural Employment Division of the Food and Agriculture Organization of the United Nations (FAO/ESWD) with the aim to better understand rural youth employment problems through a first screening and analysis of the existing data.

In the limited literature about rural youth employment it is often lamented that country-wide unemployment data are of little value because they are not disaggregated according to locality (rural/urban) and age group. Moreover, the limited data that exist for rural youth employment do not adequately reflect labour market conditions (World Bank 2009). Developing countries with high unemployment rates actually tend to be among the least poor, and within developing countries, youth unemployment rates are higher (i) among the more educated; (ii) among members of wealthier households; and (iii) in urban areas (Fares et al 2006). The rural poor with low levels of education cannot afford to idle and are more likely to be employed under poor conditions. To better assess the work prospect of rural youth, we also need to look at various aspects of underemployment, quality of employment and barriers to decent work faced by young people in rural areas.

This paper deals with both quantitative and qualitative aspects of rural youth employment. The statistical data serve to study geographic patterns and historic trends in (i) the prevalence of rural youth as a distinct demographic category; (ii) unemployment and underemployment rates among rural youth vis-à-vis urban youth and adults; (iii) the quality of rural youth's working conditions; and (iv) the barriers that young people face in their quest for 'decent work'. Such barriers can result either from general constraints in productive environments and labour markets or from problems more specific to the age-group under consideration (15-24).¹

So far, policy papers on youth employment have focused primarily on non-agricultural and formal sector employment. In order to address this gap, but as far as data availability allows, the main emphasis in this paper will be on youth employment in agriculture, which is predominantly non-formal and to a great extent family-based. Geographically, the focus of this paper is on the Global South, but occasionally the situation in developing countries is contrasted with more developed countries.

Section 2, which constitutes the bulk of this paper, takes a global perspective on rural youth employment. The sub-regional and country-level data presented in this section describe the *changing context* in which young people in rural areas of developing countries experience the labour market and try to eke out a living. Section 3 addresses a major problem of such global databases: their lack of disaggregation. Global data for rural youth as a distinct demographic group are virtually inexistent. Moreover, for a proper analysis of rural youth employment, the data need further disaggregation into young men and young women because their barriers to decent work are very different. A database of Living Standard Measurement Studies (LSMS),

¹ The United Nations, for statistical purposes, defines 'youth', as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States. This definition was made during preparations for the International Youth Year (1985), and endorsed by the General Assembly (see A/36/215 and resolution 36/28, 1981).

conducted by national statistical agencies in thirty-four developing countries in collaboration with the World Bank, constitutes a promising alternative. In section 3, employment data of Nicaragua's 2001 Living Standard Measurement Study (Encuesta Nacional de Hogares sobre Medición de Nivel de Vida) are explored and presented to illustrate the possibilities of the LSMS to inform researchers and policy makers dealing with rural youth employment.

2. Global Data

In this section, global data are presented that describe the changing context in which rural youth in developing countries have to struggle to become productive members of their communities. Most of the data were distilled from databases of international organisations like the World Bank (World Development Indicators and World Development Reports), United Nations Population Division (World Population Prospects), United Nations Food and Agriculture Organization (FAO-STAT) and the International Labour Organization (LABORSTA). These databases contain data for individual countries and sub-regions.²

In this paper, sub-regional data are presented in graphs that allow an assessment of trends. Country data are presented in thematic maps, enabling a rapid appraisal of geographic distributions.

It should be noted that each of the variables presented here may have its own measurement problems, inaccuracies and inconsistencies. Such data problems are usually well-documented on the websites of the respective organisations and for reasons of space they will not be repeated here unless they seriously impede a correct interpretation.

2.1. Rural Youth

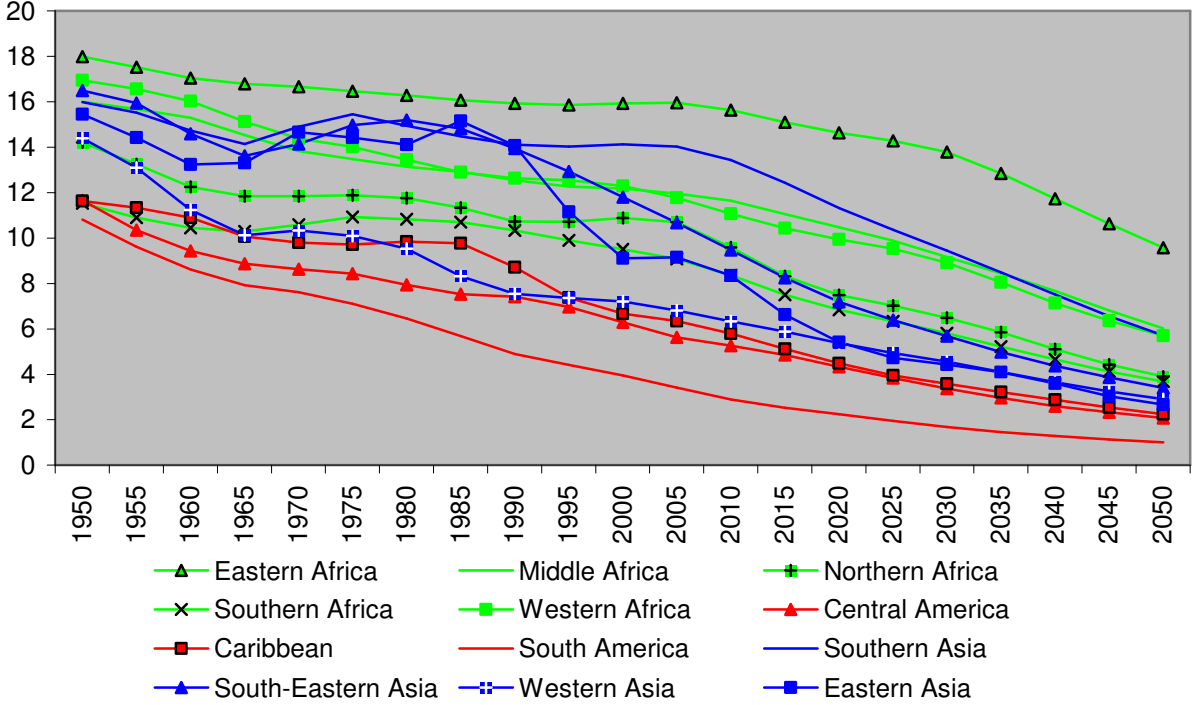
The focus in this paper is on rural youth, aged 15-24. Before going into more detail about quantity and quality of employment, we first look at some demographic trends in order to assess regional differences and changes in the proportion of the population aged 15-24 living in rural areas. For projects and interventions in the area of rural youth employment, it is vital to know the numeric importance of the target population (rural youth) across sub-regions and countries, and trends therein.

The importance of rural youth as a distinct demographic group varies widely across regions and is subject to substantial changes over time. Whereas rural youth constituted 16 percent of the population in East Africa in 2005, the figure for South America in the same year was just 3.4 percent. In all sub-regions, the proportion of rural youth has declined since 1950, and even sharper decreases are predicted for the future (see figure 1). In South America, for example, assuming an equal representation of youth in rural and urban areas, rural youth are predicted to constitute only one percent of the total population by the year 2050. In reality, the figures

² The sub-regions used by these organisations sometimes vary, and so does the time span. FAO's sub-regions and those of UNPD are quite similar. The only difference is that FAO's 'Southern Asia' and 'Central Asia' are grouped together - and labelled 'South-Central Asia' - in UNPD's World Population Prospects. The regional division used by the World Bank for its 'World Development Indicators' is quite different from the one used by FAO and UNPD. The World Bank's regional grouping distinguishes fewer sub-regions. Moreover, there are important differences for individual countries (e.g. Sudan, Iran). With regards to the time span, the UNPD World Population Prospects run from 1950 to 2050 and thus include predictions of the future. The other databases are purely retrospective, and usually start around 1950 or 1960.

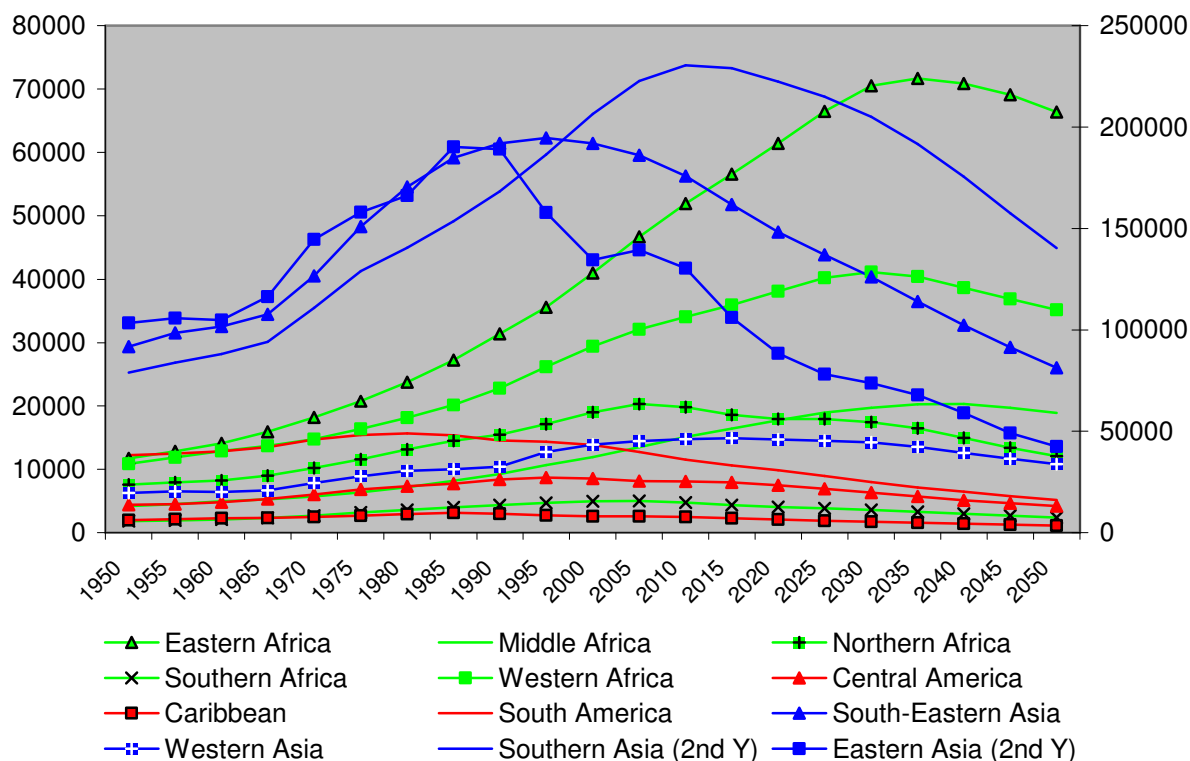
for rural youth are probably even a bit lower because this age group is more prone to migrate to urban centres than for example small children and elderly people.

Figure 1: Rural youth (aged 15-24) as % of total population by sub-region (1950-2050).
 Source: FAOSTAT and UNPD World Population Prospects 2008 Revision.



Though the *proportion* of rural youth is decreasing in all sub-regions, the absolute number of rural youth has increased in most sub-regions and will continue to increase in most of Sub-Saharan Africa until 2030 or 2040 (see figure 2). In Eastern Asia, South-Eastern Asia and Latin America, the absolute number of youth aged 15 to 24 living in rural areas has already started to decrease in the past ten to twenty-five years.

Figure 2: Total number of rural youth (aged 15-24) by sub-region (1950-2050). Note: data for South Asia and East Asia on second y-axis. Source: FAOSTAT and UNPD World Population Prospects 2008 Revision.



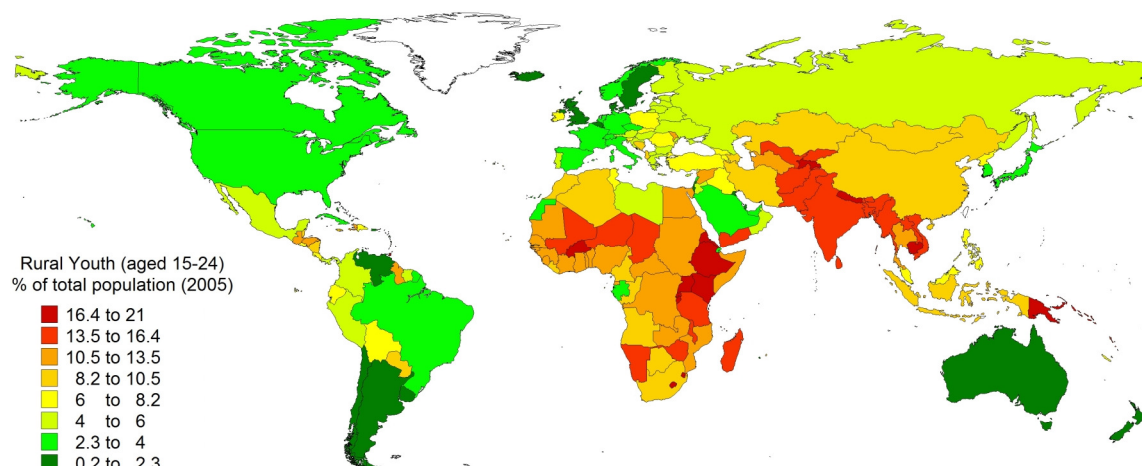
The decreasing numeric importance of rural youth is due to (1) urbanization and (2) a demographic transition towards lower fertility rates and lower mortality rates. While in Latin America and the Middle East the process of urbanization is very advanced, in Eastern Africa and Southern Asia the majority of people still live in rural areas.³ In Sub-Saharan Africa it is expected that fertility rates will remain high for some time, and life expectancy will not increase as sharply as in other regions. Therefore youth aged 15-24 will continue to constitute a large part of the total population (around twenty percent in Eastern, Middle and Western Africa between now and 2030).⁴

Map 1 shows the proportion of the population aged 15-24 living in rural areas (i.e. rural youth) for most countries of the world. The world map of rural youth roughly corresponds with the sub-regional graphs presented above. However, it also becomes clear that within sub-regions, important differences are discernible. Although rural youth is a relatively small group in Latin America, for example, the proportions of rural youth in some individual countries like Paraguay, Guyana, Guatemala, Honduras and Haiti are similar to many African Countries. The countries with the highest proportion of rural youth can be found in the Horn of Africa, the Sahel and in Southern Asia. Other countries with relatively high percentages of rural youth among their population are Burkina Faso, Papua New Guinea and Tajikistan.

³ Source: FAOSTAT. See figure 3 in the web version of this paper.

⁴ Source: FAOSTAT and UNPD World Population Prospects 2008 Revision. See figure 4 in the web version of this paper.

Map 1: Rural youth aged 15-24 as % of total population of 186 countries (2005). Source: FAOSTAT and UNPD World Population Prospects, 2008 Revision.



2.2 Agricultural Youth

It is important to realise that rural youth and agricultural youth are not the same. Firstly, young people in rural areas are not necessarily involved in agriculture. In the more developed countries of Europe and North America, for example, the vast majority of people living in rural areas earn an income in non-agricultural sectors of the economy. In less developed countries, this process is much less advanced (see maps below), but rural non-farm income generating activities are also on the increase in most countries of the Global South. Secondly, youth living in urban localities can also be involved in agricultural activities. This is especially common when relatively small towns pass the critical limit for being considered 'urban' (usually at 5,000 inhabitants).

The proportion of the population depending on agriculture is decreasing in all sub-regions of the Global South, and at a similar pace.⁵ East Africa, Central Africa, West Africa and South and East Asia still have more than half of their population involved in agriculture. In Southern Africa, Latin America, the Middle East and Central Asia, only twenty to thirty percent of the population is considered agricultural. North Africa takes an intermediary position.

Unfortunately, the available global data on agricultural population⁶ are not disaggregated according to age groups so we cannot test the hypothesis that youth are abandoning agriculture more than adults. However, evidence from fifteen countries, based on Living Standard Measurement Surveys, confirms that young household heads in rural areas are more likely to be involved in non-farm activities than older household heads. Davis et al (2007: 31) state:

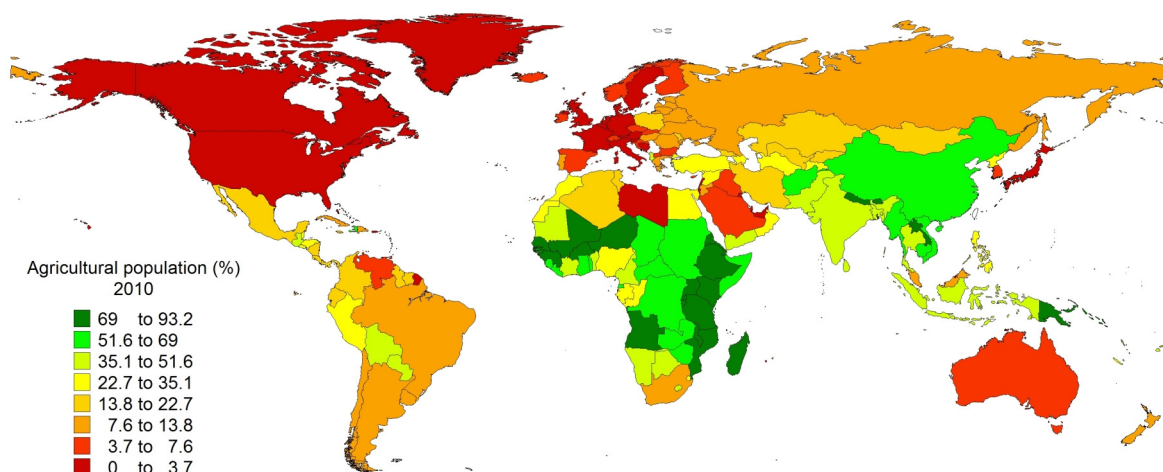
"Older household heads are (...) less likely to participate in non-agricultural self employment activities. This may reflect that these households began their path of economic activity prior to the availability of alternatives to agriculture and have generally remained on that path. Thus, they tend to remain in agricultural production while younger heads follow alternative routes to improve their household's well-being."

⁵ Source: FAO-STAT. See figure 5 in the web version of this paper.

⁶ FAO definition of agricultural population: All persons depending for their livelihood on agriculture, hunting, fishing and forestry. It comprises all persons economically active in agriculture as well as their non-working dependents. Source: FAO-STAT glossary (<http://faostat.fao.org/site/375/default.aspx>).

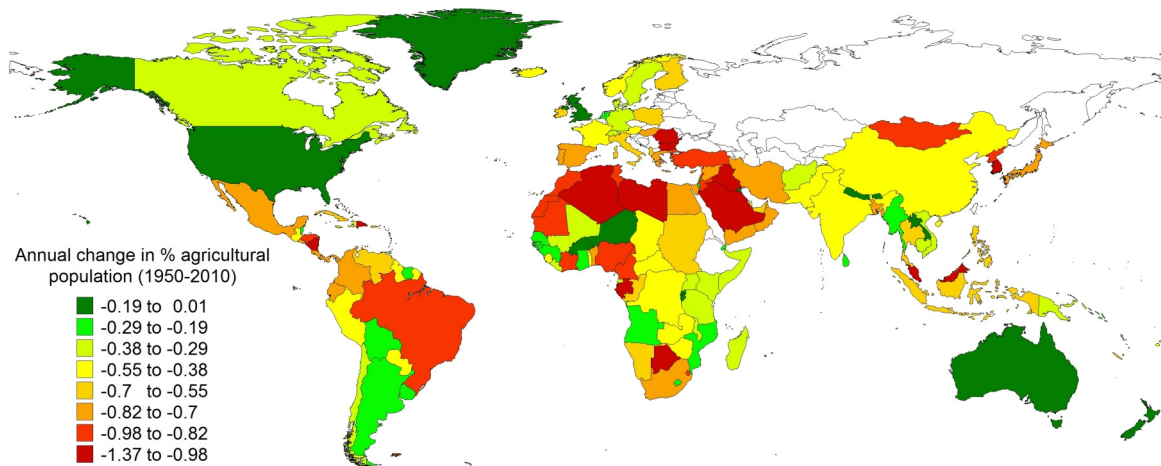
Another interesting finding of this study is that the younger household heads who are engaged in farming tend to derive a higher income from their agricultural activities than older household heads. This is probably because the younger generation is more open to new crops and technologies that produce a higher yield. Possibly, they are also more involved in post-harvest value addition (storage, processing) or more profitable ways of marketing their produce (Davis et al 2007). These findings suggest that special agricultural extension services targeting rural youth can be highly effective in (1) improving the quality of rural youth employment; and (2) raising agricultural productivity in general. This would have an important impact on poverty reduction as poverty in the Global South is mostly concentrated in rural areas and in the occupational group of farmers.

Map 2: Agricultural population as % of total population (2010). Source: FAO-STAT.



The world map of agricultural population (map 2) shows that in Sub-Saharan African countries, as well as in South and East Asia, a large proportion of the population still depends on farming, and that the process of de-agrarianisation is more advanced in Latin America, Southern Africa, North Africa, Central Asia and the Middle East. These economies are more diversified and are likely to offer a broader choice of employment opportunities for the youth. Although most of these non-farm employment opportunities are situated in urban areas, rural youth can access these opportunities by migrating to urban centres. An important condition for young rural people to gain access to urban non-farm employment is that they are sufficiently qualified and that they are not constrained in their mobility. According to the 2009 Human Development Report (UNDP 2009) geographic mobility tends to have a positive effect on development of the people involved (migrants, relatives at home and receiving communities). At the national level, human mobility helps to reconcile supply and demand of labour.

Map 3: Evolution of agricultural population as % of total population (% annual change) (1950-2010). Source: FAO-STAT.

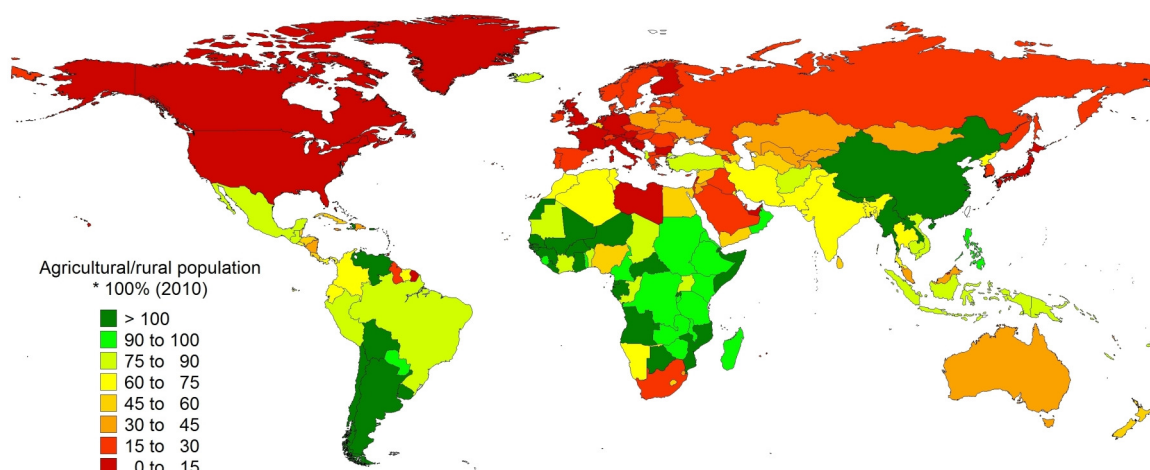


The trends in agricultural population (map 3) do not show a clear sub-regional picture. Although the trend is negative in almost all countries, the extent to which populations become less involved in agriculture differs greatly between countries within all sub-regions. Three types of countries can be distinguished: (1) countries that already had a low proportion of the population engaged in agriculture in 1950 (e.g. US, Australia, NW Europe); (2) countries that experienced a rapid de-agrarianisation in the past decades (e.g. North Africa, Brazil, Nigeria); and (3) countries that remain essentially agricultural (East Africa, parts of West Africa, some countries in Southeast Asia). From an economic perspective, it is usually a good sign when the proportion of the population involved in agriculture decreases (World Bank 2007). Historically, agricultural development has preceded a more general economic take-off. When returns to agricultural labour increase and less agricultural workers are needed to produce the same output, more people can be employed in non-farm activities that usually generate a higher income. The transition is not always smooth, however, especially when the agricultural population lacks the education and skills that are required for industrial and service jobs. Moreover, when demand for agricultural labour decreases, it does not automatically mean that demand for non-agricultural labour increases at the same time. When agriculture becomes more capital-intensive and requires less labour, it typically causes higher levels of unemployment before more non-farm employment opportunities become available.

As mentioned above, rural population and agricultural population are not the same. In South Africa, for example, less than thirty percent of the rural population is involved in farming. In China on the other hand, more people are considered 'agricultural' than 'rural'. This means that in this region many urbanites are also involved in agricultural activities.

Map 4 shows a clear North-South divide in the de-agrarianisation of the country side, which is much more advanced in Europe and North America. In most countries of the Global South, on the contrary, at least half the rural population is involved in agriculture. No very clear differences between Africa, Latin America and Asia are discernible.

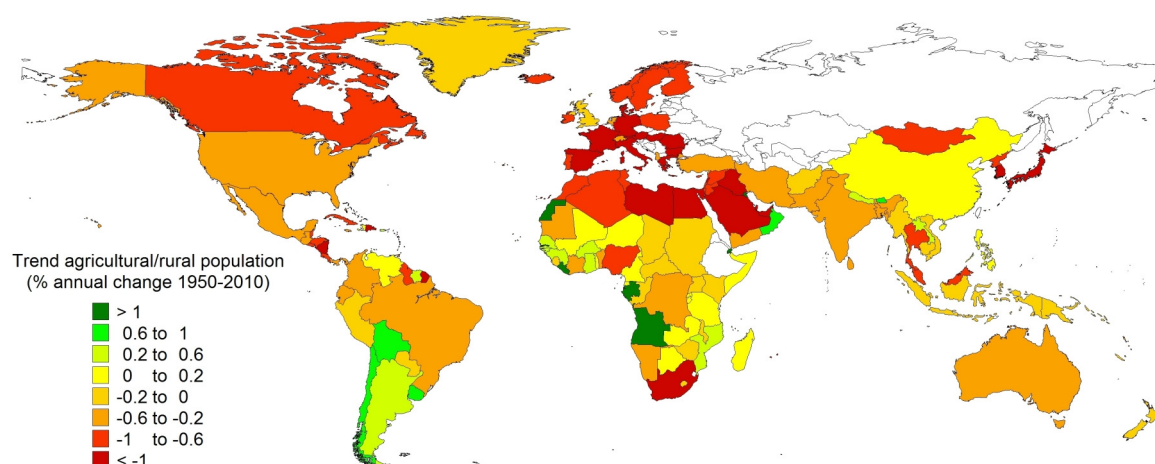
Map 4: Agricultural population as % of rural population (2010). Source: FAO-STAT.



When the agricultural population grows at a slower pace than the rural population, this usually means that the importance of rural non-farm income is growing; that increasing numbers of rural people earn a living outside of agriculture. This is the case in most sub-regions.⁷ When the agricultural population increases faster than the rural population - as in East Asia and Southeast Asia - it does not necessarily mean that the importance of non-farm income reduces. More likely, it means that increasing numbers of urban people engage in farming. This usually does not involve urban people who used to have non-farm livelihoods. Rather, when agricultural settlements grow, they can become 'urban' in terms of population size whilst retaining much of their agricultural character. Such urban agricultural settlements could actually function as centres of innovation because they are likely to have a higher level of facilities and access to markets than remote villages.

Map 5 shows the average annual change (%) in the proportion of agricultural population over the rural population for the period 1950-2010. No clear differences in the long-term trend are discernible between Africa, Latin America and Asia, but within these continents there are marked differences.

Map 5: Evolution of agricultural population as % of rural population (annual change) (1950-2010). Source: FAO-STAT.



⁷ Source: FAO-STAT. See figure 6 in the web version of this paper.

2.3 Occupation

In this section we look at the occupations of youth (15-24) around the world. As far as data availability allows, we look at rural and urban youth separately. The following broad types of occupation can be distinguished:

- Student
- Part of labour force:
 - Employed:
 - Salary work / wage labour
 - Self-employed
 - Contributing to family labour
 - Underemployed (see section 2.3):
 - Working less hours per week than desired
 - Working below one's educational / skill level
 - Having a job with low productivity and earnings
 - Unemployed: looking for work
- Not in labour force, not in school
 - Involved in child care and / or domestic tasks
 - Not allowed to work outdoors
 - Lost hope to find work, depend on relatives

In practice, there can be overlap between these broad types of occupation, for example when a student works during weekends or school holidays. In the youth employment literature, the categories 'self-employed' and 'contributing to family labour' are labelled 'vulnerable employment' (see section 2.4). In practice, those working for an employer can be equally vulnerable, especially in the absence of laws and regulations protecting workers' rights. This problem is likely to be most pervasive among agricultural employees.

When young people in the age of 15 to 24 are attending school or improving their skills through vocational training they are more likely to find decent work later on. Those who are no longer in school - the majority in most developing countries, especially in Sub-Saharan Africa - are either working, looking for work or outside the labour force because of child care or cultural barriers to work outdoors, especially for women. As far as data availability allows, this section will sketch some broad trends and patterns of youth employment with a focus on developing countries, and where possible on rural areas.

2.3.1 Unemployment

As mentioned in the introduction, unemployment rates seem to say little about labour market conditions in developing countries. In the poorest countries, to be unemployed is somehow a 'luxury' that few can afford. In the absence of decent and well-paid work opportunities, people in the poorest countries will be forced to accept ill-paid and often unsafe wage employment or, more commonly, earn a meagre and unstable income as self-employed in the informal sector or on low-yielding plots of land.

Despite these qualifying remarks, it is still revealing to study the unemployment rates in different parts of the world and for different age groups, for men and women, and for rural and urban areas separately. The International Labour Organisation's report (ILO 2009) on global employment trends contains sub-regional unemployment data for the past ten years and

disaggregated according to gender and age group (youth / adult). Unfortunately, no disaggregation along rural and urban lines is presented in this ILO report. The 2007 World Development Report (called "The Next Generation") distinguishes both between youth and adult unemployment, and between rural and urban youth unemployment (World Bank 2006). The report's appendix contains data on rural youth employment for 74 countries, youth labour force participation (male / female) and the proportion of youth 'not in labour force, not in school'. The World Bank's definitions of labour force participation, unemployment rate and 'not in labour force, not in school' are provided in box 1.

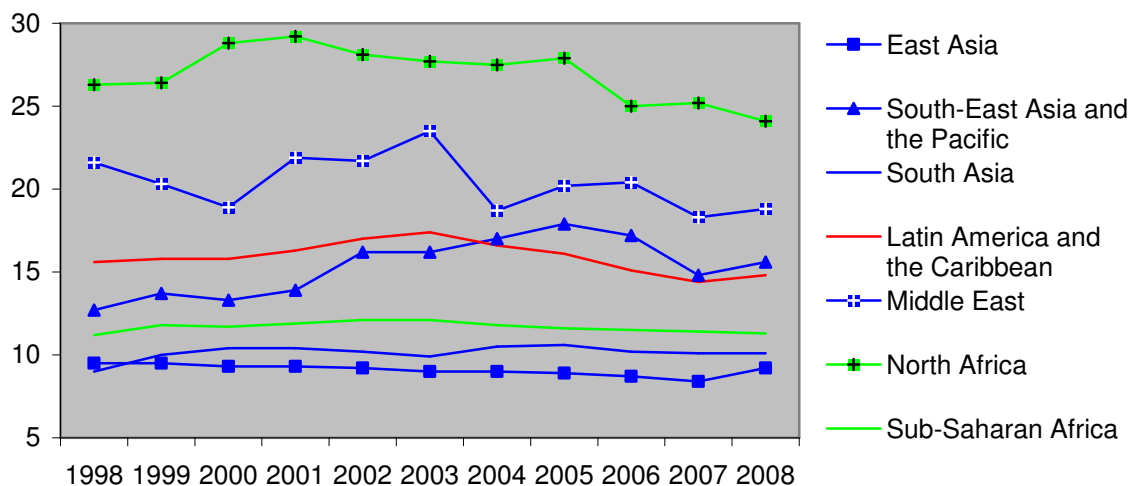
Box 1: Definitions of labour force participation, unemployment rate and 'not in the labour force and not in school' (quoted from World Bank 2006, page 283):

- **Labor force participation rate** is the share of the youth population, either employed or unemployed, that is economically active.
- **Unemployment rate** is the share of the labor force that is unemployed. To be considered unemployed, an individual must be not employed but actively seeking work.
- **Not in the labor force and not in school** is the youth population that is neither in the labor force nor in school.

Figure 3 shows the trends in youth unemployment for different sub-regions in the 'developing world'. Since an unemployed person is defined as someone who is not employed and actively looking for employment, this excludes people who for different reasons are not available to the labour market, for example because of schooling, child care or cultural barriers to work as is the case for women in some countries. Youth unemployment rates are highest in North Africa and the Middle East and lowest in East Asia, South East Asia and Sub-Saharan Africa. Latin America takes an intermediate position. No clear unemployment trends are discernible over the past ten years, but it should be noted that the effect of the present global economic crisis is not yet visible in this graph.

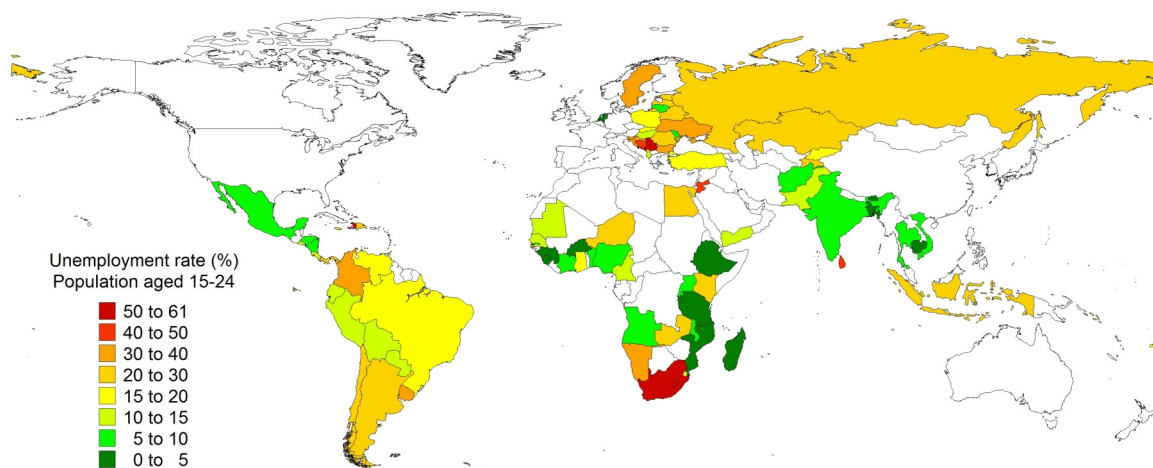
Other findings based on the data from ILO (2009) are that (1) youth unemployment rates are substantially higher than adult unemployment rates in all regions and (2) that women tend to be more often unemployed in Latin America, North Africa and the Middle East. In Asia and Sub-Saharan Africa unemployment rates of men and women are quite similar.

Figure 3: Youth unemployment by sub-region (%)(1998-2008). Source: ILO (2009).

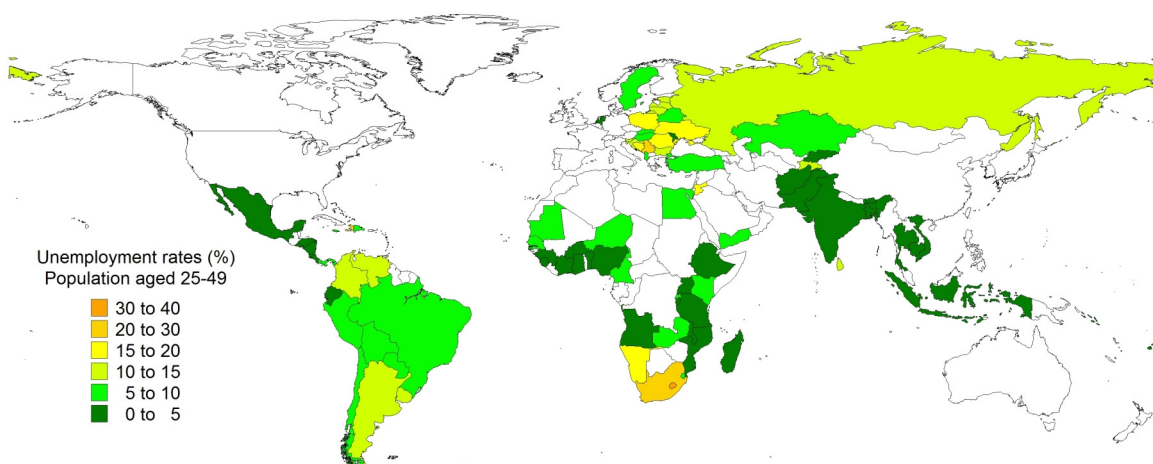


Map 6 and 7 show the unemployment rates of youth and adults for ninety-one countries in the world. In almost all countries, youth are more likely to be unemployed than adults. Youth unemployment rates are generally higher in Latin America and Eastern Europe than in the African and Asian countries for which data are available (see map 6). Youth unemployment rates also vary greatly *within* sub-regions. In South-Africa, for example, Youth unemployment rates are more ten times higher than in neighbouring Mozambique. In map 8, youth employment rates are divided by adult employment rates. This ratio indicates the magnitude of difference between youth and adult unemployment rates. In countries with a large youth - adult unemployment gap, young people face particular problems in entering the labour market. The high rates for India, South East Asia and Egypt may partly be explained by land scarcity (see section 2.6). In many parts of the developing world, youth are simply expected to work on the family land in the absence of other work opportunities. In land-scarce areas with many landless families, agriculture's potential to absorb surplus labour is more limited.

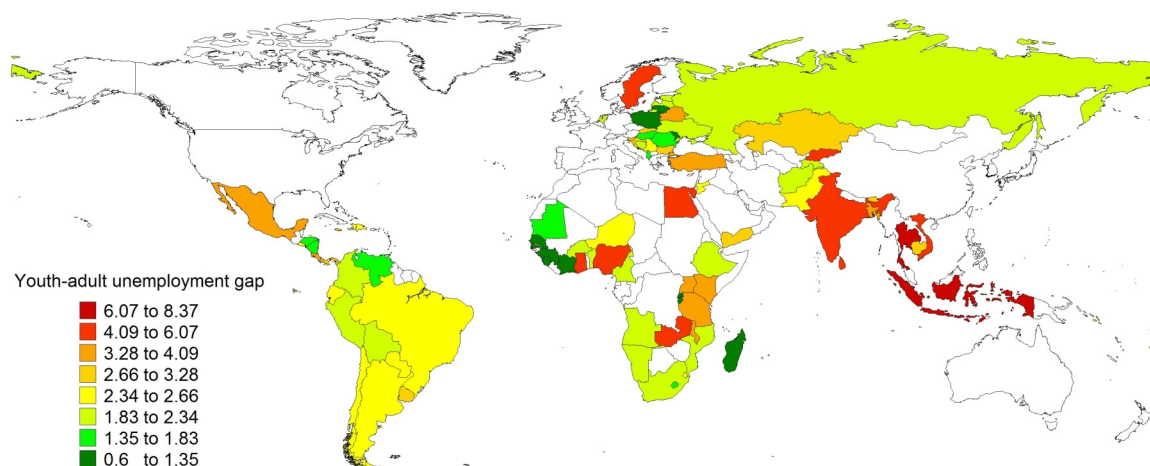
Map 6: Youth unemployment rates for 91 countries. Survey years vary. Source: World Development Report 2007.



Map 7: Adult unemployment rates for 91 countries. Survey years vary. Source: World Development Report 2007.

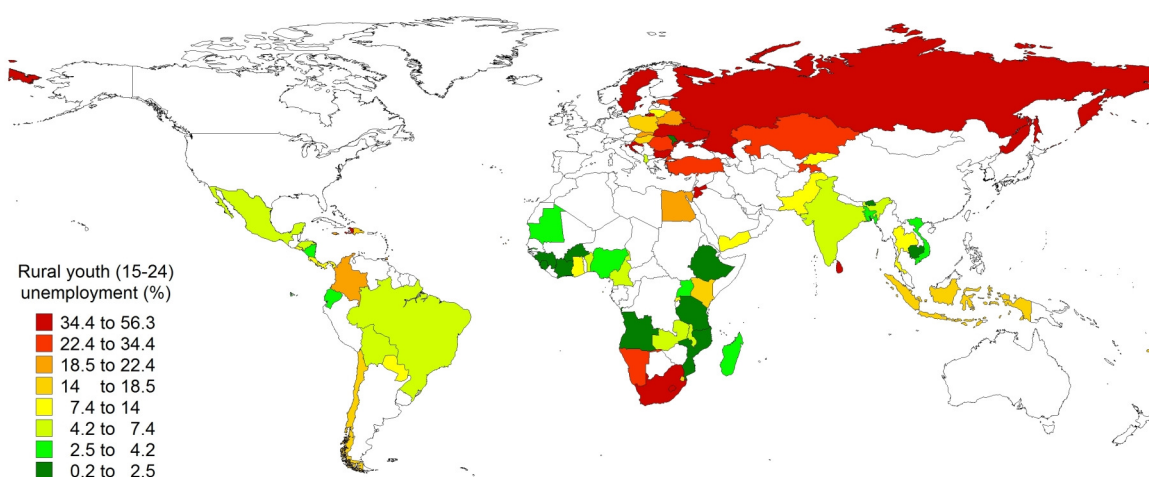


Map 8: Youth unemployment divided by adult unemployment. Survey years vary. Source: Calculated from World Development Report 2007.

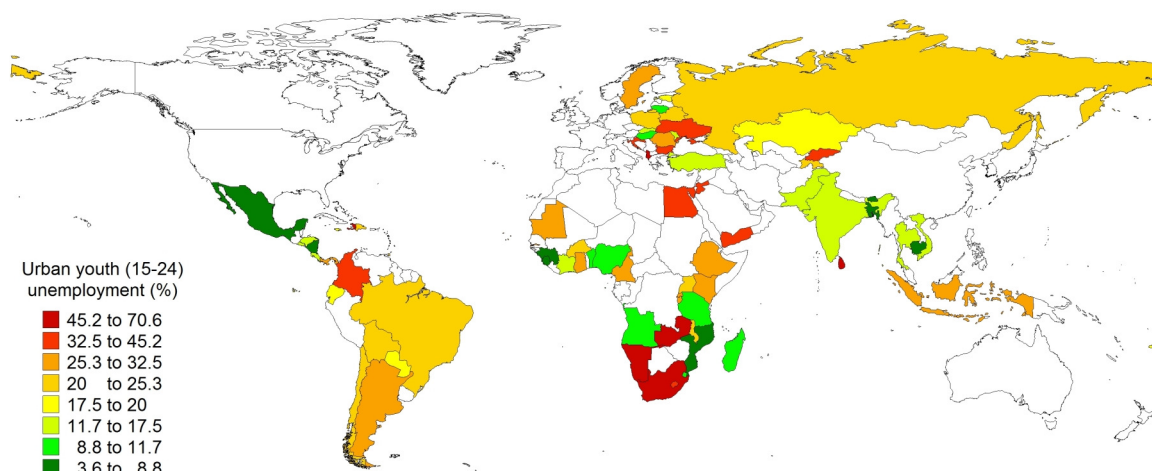


Map 9 and 10 show the unemployment rates of rural and urban youth for 74 and 76 countries respectively. An interesting observation is the difference between developing countries and the 'countries in transition' in Eastern Europe. In developing countries youth unemployment is mainly an urban phenomenon while in Eastern Europe - and probably also Western Europe and North America - youth unemployment rates are higher in rural areas. Map 9 further shows that rural youth unemployment is not common in Sub-Saharan Africa (below five percent in many countries). In the absence of employment opportunities, young people in rural Africa will usually work on the land, mostly as contributing family labourers. Notable exceptions are South-Africa, Namibia and Kenya. These three countries have a history of European settlement, which probably has left its traces in the current land tenure situation. Whereas in the rest of Sub-Saharan Africa, surplus labour is absorbed by agriculture, in these three countries rural youngsters may have few opportunities in terms of land access.

Map 9: Rural youth unemployment rates for 74 countries. Survey years vary. Source: World Development Report 2007.



Map 10: Urban youth unemployment rates for 76 countries. Survey years vary. Source: World Development Report 2007.



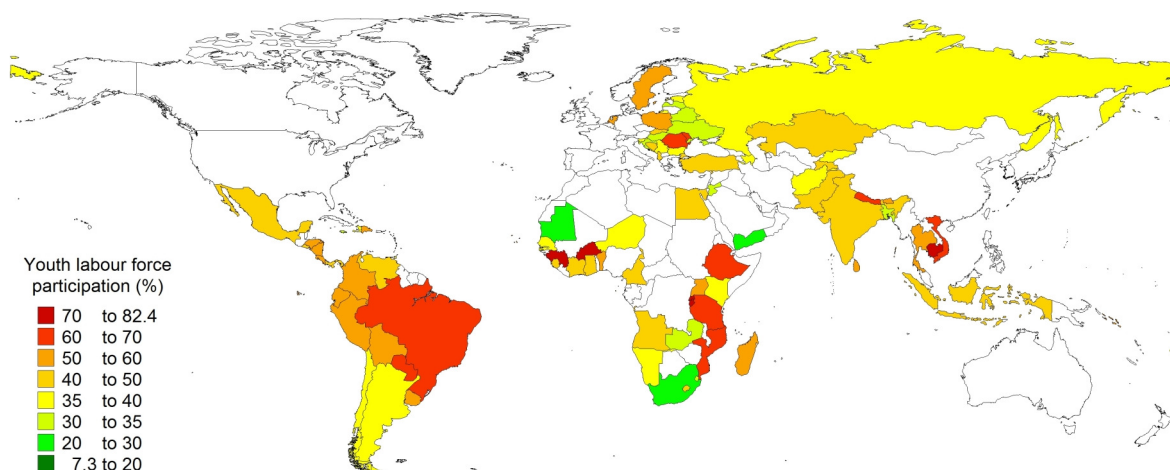
2.3.2 Labour Force Participation

Apart from unemployment rates, appendix A3 of the 2007 World Development Report (World Bank 2006) also contains gender-specific data on youth labour force participation and the proportion of young people that are not part of the labour force and not in school (see box 1 above for definitions). Unfortunately, no panel data at the sub-regional level are available for these variables so it is not possible to analyse the trends in labour force participation.

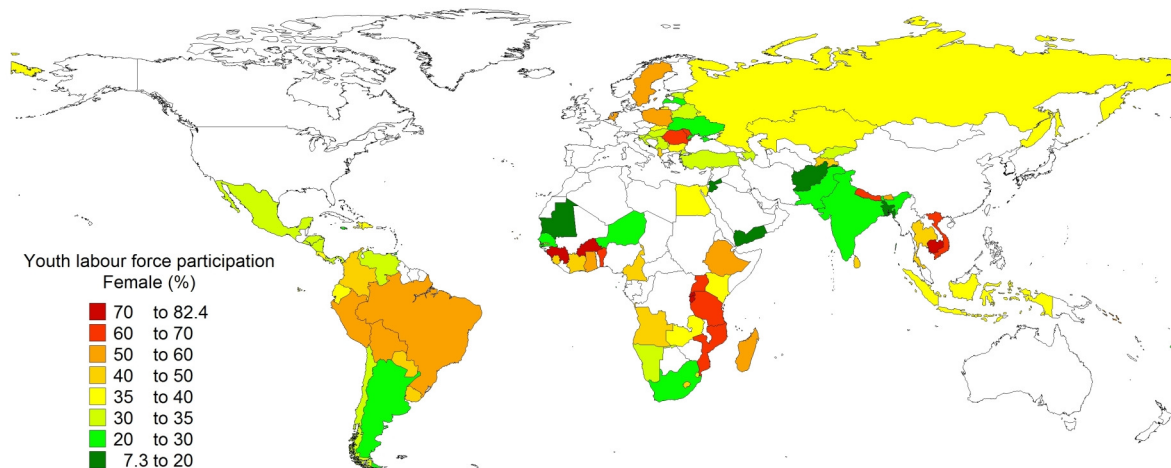
Map 11, 12 and 13 show the labour participation rates for youth, young women and young men. Low youth labour force participation can be positive if it means that most youngsters go to school to increase their future chances of finding decent work. It can be less positive if it means that young people's access to the labour market is blocked. No clear regional distribution is discernible for the combined male and female youth labour force participation (see map 11). The gender-specific maps of youth labour force participation (map 12 and 13) show that in most countries young men are more likely to participate in the labour force than young women. However, in several Sub-Saharan African countries and in Bhutan and Nepal, young women are more likely to participate in the labour force than young men. The largest difference in male and female youth labour force participation rates can be found in Latin America and in countries with a large Islamic population. In some countries, especially in Latin America, this is partly because more young women than young men are attending school.⁸ However, cultural barriers to work are probably more important explanations for low labour force participation of women in most of these countries.

⁸ Source: World Development Indicators. See map 22 to 27 in the web version of this paper.

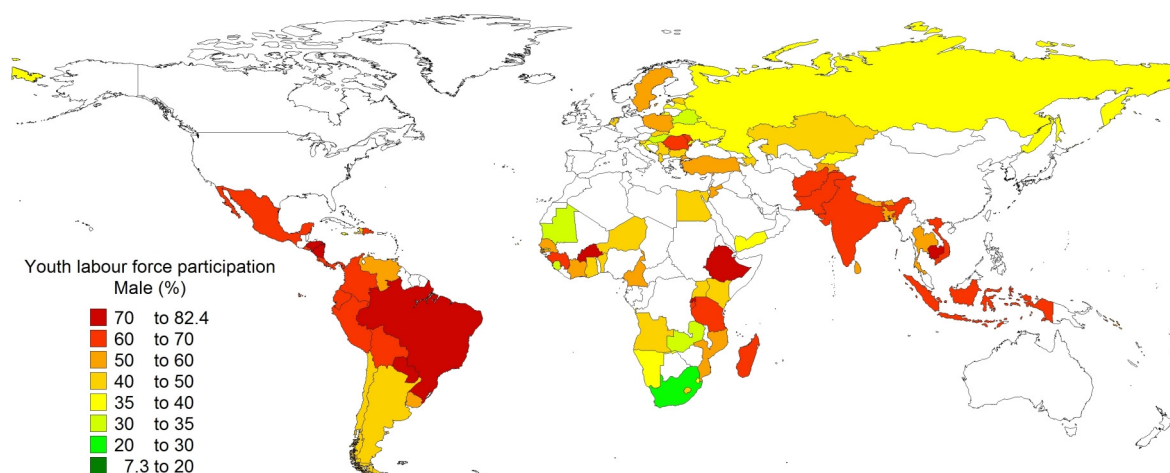
Map 11: Youth labour force participation rates for 90 countries. Survey years vary. Source: World Development Report 2007.



Map 12: Young women labour force participation rates for 89 countries. Survey years vary. Source: World Development Report 2007.



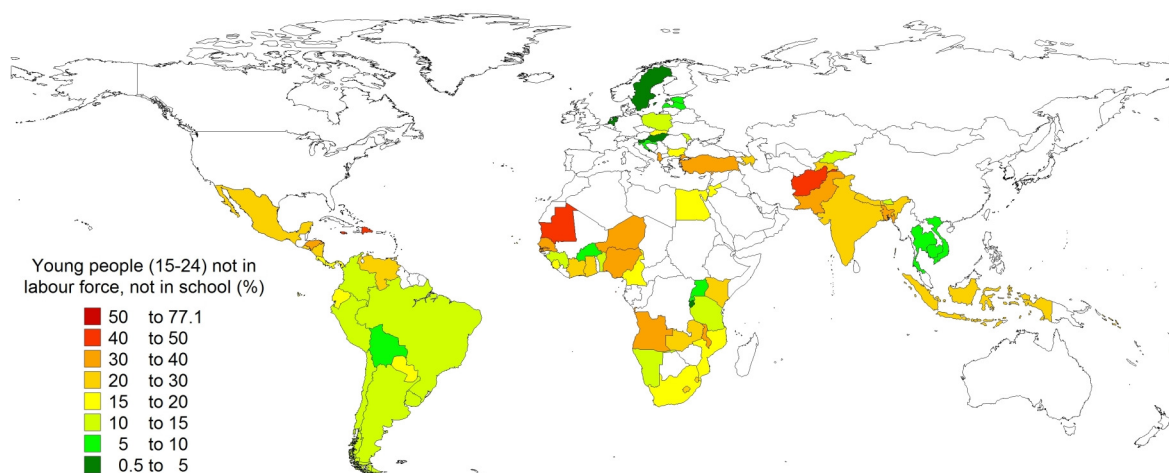
Map 13: Young men (15-24) labour force participation rates for 89 countries in the world. Note: the survey years vary. Source: World Development Report 2007.



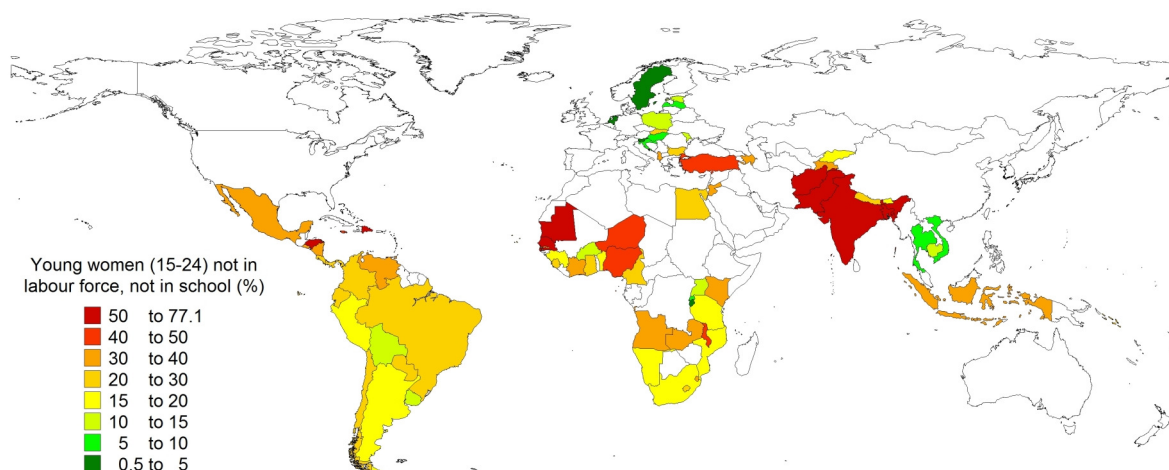
Map 14, 15 and 16 show the proportion of the youth (total, female, male) that are not part of the labour force and not in school. This group is relatively small in South America and parts of South East Asia. In India, Pakistan, Afghanistan, Mauritania and Senegal, on the other hand, more than fifty percent of the young women are outside the labour force and not in school. An explanation could be that a large proportion of the women in these countries are busy with child care, which prevents them to work or to go to school. As we will see below, however, young women's fertility rates in these countries are much lower than in West, Middle and East Africa where the proportion of young women not in the labour force and not in school is much smaller. Cultural barriers to outdoor work and to educational progress may thus be more likely explanations of low labour force participation and limited school attendance in aforementioned countries.

Generally, the proportion of young women not in the labour force and not in school is higher than that of young men. As we have seen above, cultural barriers to female labour force participation seem to play an important role in some countries, but child care obligations are probably of greater influence globally. With fertility rates decreasing strongly in most developing countries (see below), it can be expected that young women's labour force participation will increase as has happened in Europe in the second half of the 20th century. At a macro level, this is good news for the economies of developing countries. For many women in these countries, however, the conditions under which they will enter the labour force are likely to be poor.

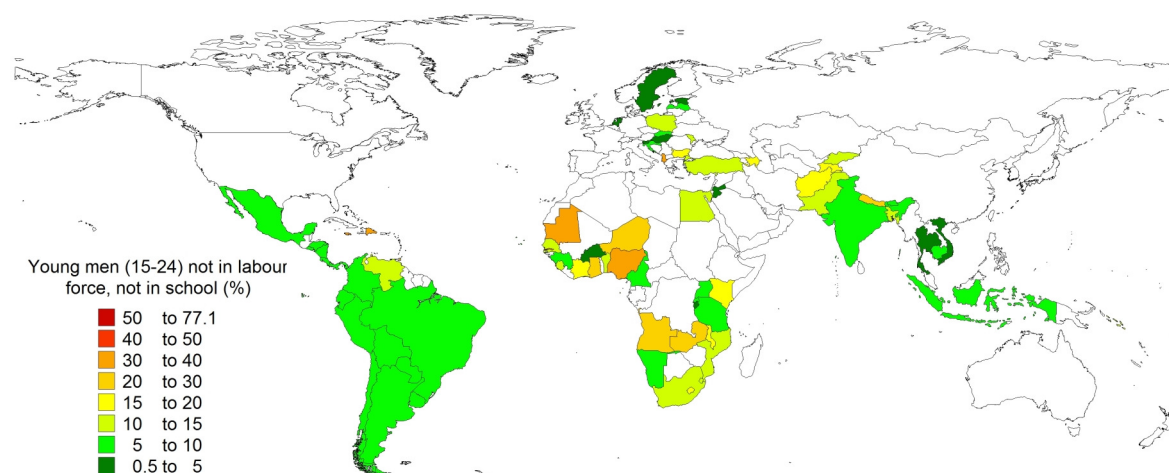
Map 14: Youth not in labour force not in school for 81 countries. Survey years vary. Source: World Development Report 2007.



Map 15: Young women not in labour force not in school for 81 countries. Survey years vary.
Source: World Development Report 2007.



Map 16: Young men not in labour force not in school for 81 countries. Survey years vary.
Source: World Development Report 2007.



2.3.3 School Attendance

Education plays an important role in increasing people's chances of finding decent work. Map 17 and 18 show the enrolment rates for secondary schools and tertiary education (see box 2 for definitions of net and gross enrolment rates). Panel data at the sub-regional level - available from 1991 onwards - are plotted in figure 4.

Box 2: UNESCO definitions⁹ of net and gross enrolment:

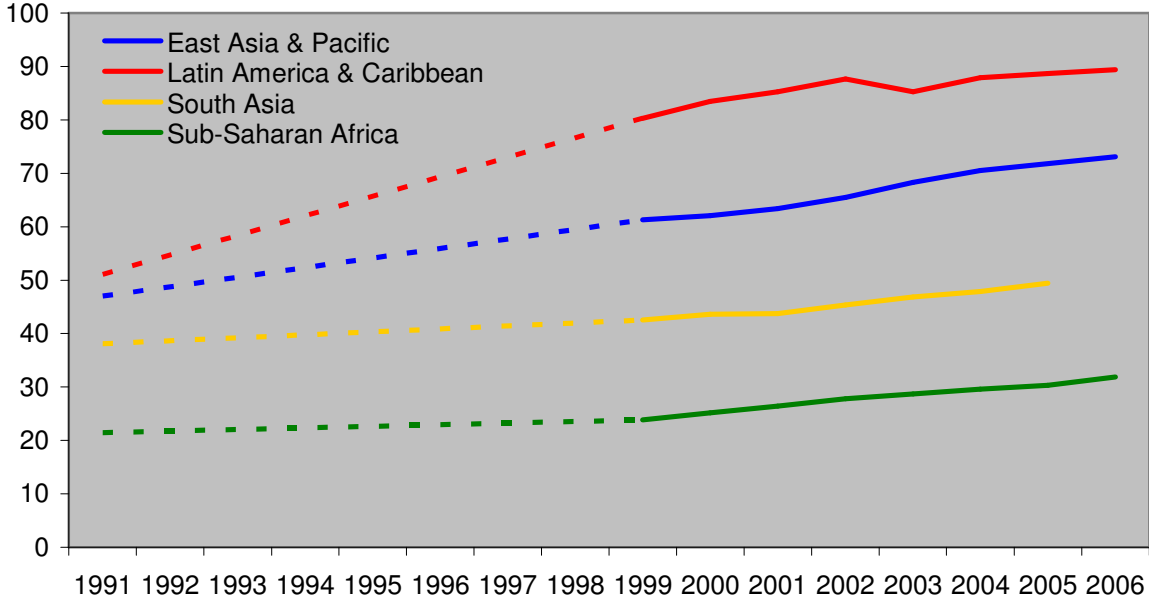
- **Net enrolment (secondary school):** Enrolment of the official age-group for a given level of education expressed as a percentage of the corresponding population.
- **Gross school enrolment (tertiary):** Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education in give school-year.

⁹ Source: glossary at <http://www.uis.unesco.org>.

School enrolment is clearly lowest in Sub-Saharan Africa and South Asia, and highest in Latin America & the Caribbean, East Asia & the Pacific and the Middle East & North Africa (see figure 4). In Latin America & the Caribbean, and East Asia & the Pacific almost every child now goes to primary school¹⁰, and in Latin America & the Caribbean, the enrolment rates for secondary education are almost ninety percent. Furthermore, the 2000s saw a sharp increase in enrolment in tertiary education, especially in Latin America & the Caribbean. In this region more women than men now attend tertiary institutions. Great improvements in terms of female participation in tertiary education are also discernible in East Asia & the Pacific and in the Middle East & North Africa.¹¹

Despite some positive trends, Sub Saharan Africa lags far behind in terms of school attendance and gender balance in education. The 2000s saw a strong increase in primary school enrolment, especially among girls.¹² While the trend in the ratio of girls to boys in secondary education was slightly positive in the early 1990s, it has been stagnating in the last few years. In South Asia the positive trend in the ratio of girls to boys in secondary schools was more consistent: the ratio increased from sixty percent in the early 1990s to eighty percent in 2006.¹³

Figure 4: Sub-regional trends in gross secondary school enrolment (1991-2006). Source: World Development Indicators.



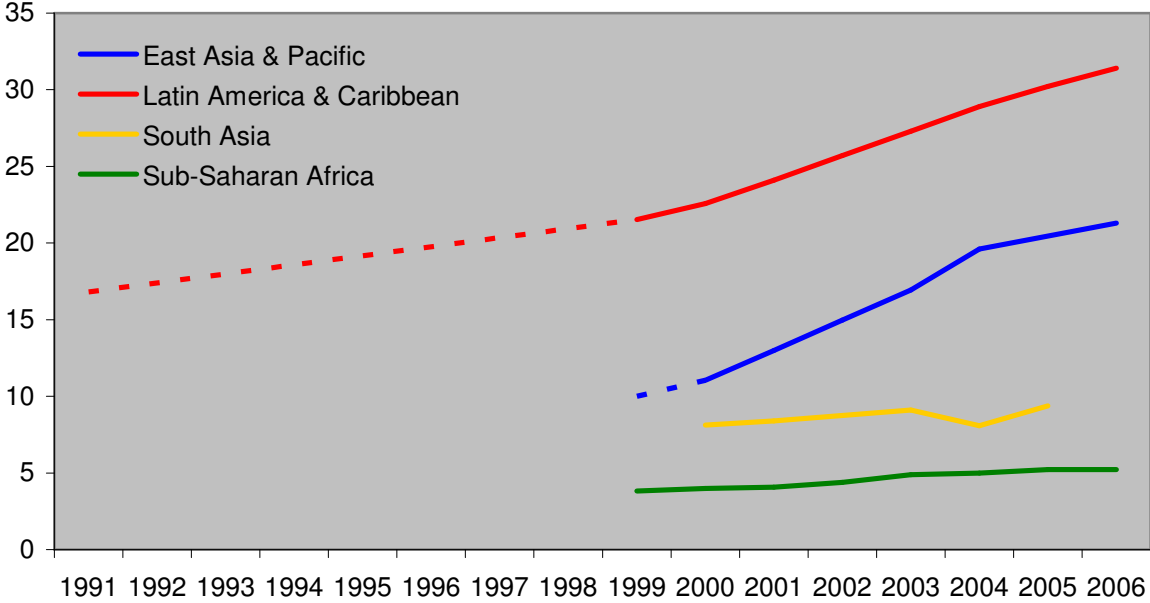
¹⁰ Source: World Development Indicators. See figure 8a in the web version of this paper.

¹¹ Source: World Development Indicators. See figure 8f in the web version of this paper.

¹² Source: World Development Indicators. See figure 8b in the web version of this paper.

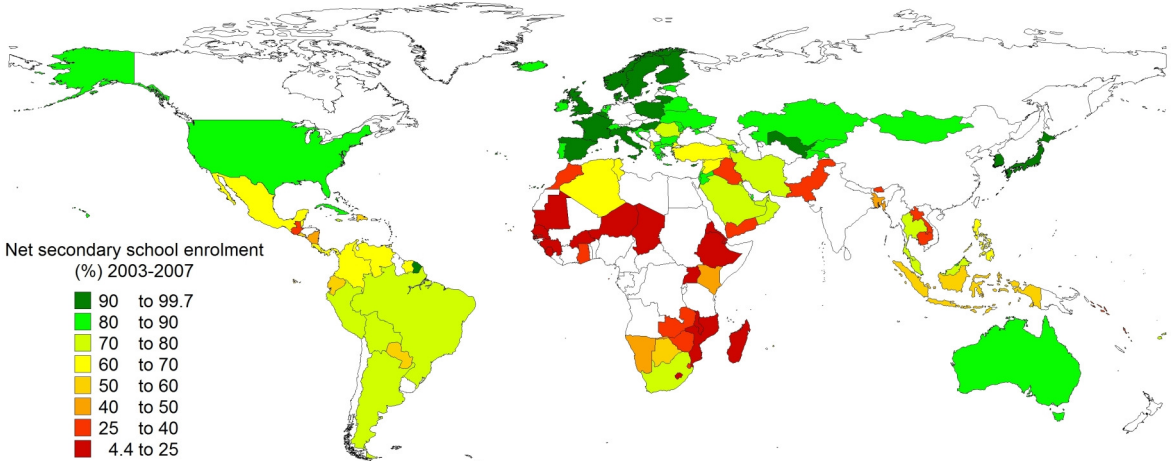
¹³ Source: World Development Indicators. See figure 8d in the web version of this paper.

Figure 5: Sub-regional trends in gross tertiary education enrolment (1991-2006). Source: World Development Indicators.

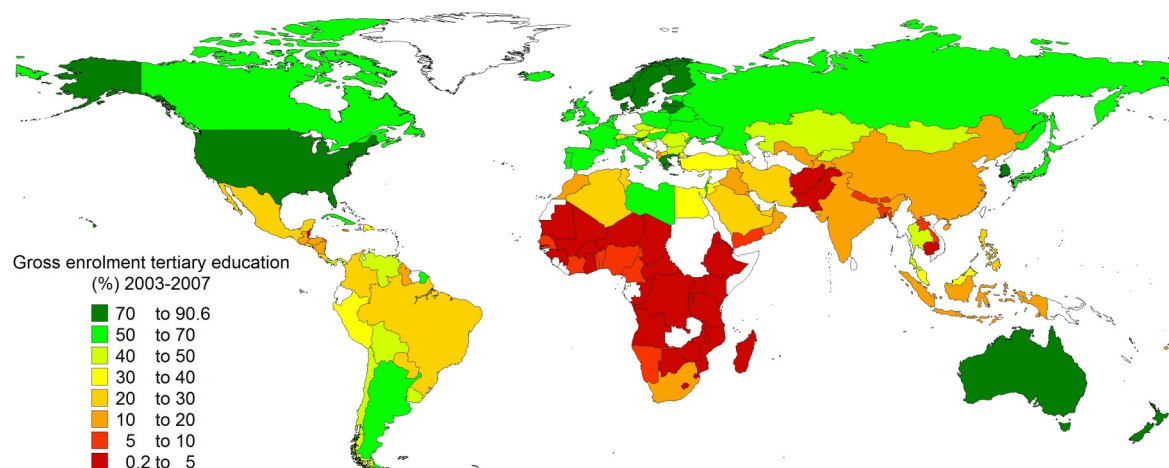


The sub-regional trends sketched above are confirmed in the world maps of education below (map 17 and 18). The low levels of education in Sub-Saharan Africa can seriously hamper the necessary transition to a more productive environment with high quality work opportunities for the youth, both in agriculture and in the non-farm sector. For agricultural and rural development, additional problems are that rural education levels tend to be below the national average and that the more educated rural youth are more likely to migrate to urban centres.

Map 17: Net secondary school enrolment (%) of 142 countries (average 2003-2007). Source: World Development Indicators.



*Map 18: Gross enrolment tertiary education (%) of 154 countries (average 2003-2007).
Source: World Development Indicators.*



2.3.4 Involvement in Child Care

In the introduction of this section, some broad categories of youth occupations were sketched: schooling, working, unemployed, and a fourth category called 'not in labour force, not in school'. The data presented in section 2.2.2 showed that young women are much more likely than young men to fall in the last category, especially in South Asia and Latin America. Apart from possible cultural barriers to work outside the household and lack of measures for unpaid household work, child care responsibilities are probably the most important explanation for this phenomenon. When women get children in their teens, they are likely to quit school and their opportunities to find decent work become more limited.

The World Bank's World Development Indicators include data on fertility (1960-2008) and adolescent fertility (1997-2007) at the sub-regional level and for almost all countries in the world. The data are presented in figure 6 and 7 and map 19 and 20.

Figure 6: Total fertility rates by sub-region (births per woman), 1960-2007. Source: World Development Indicators.

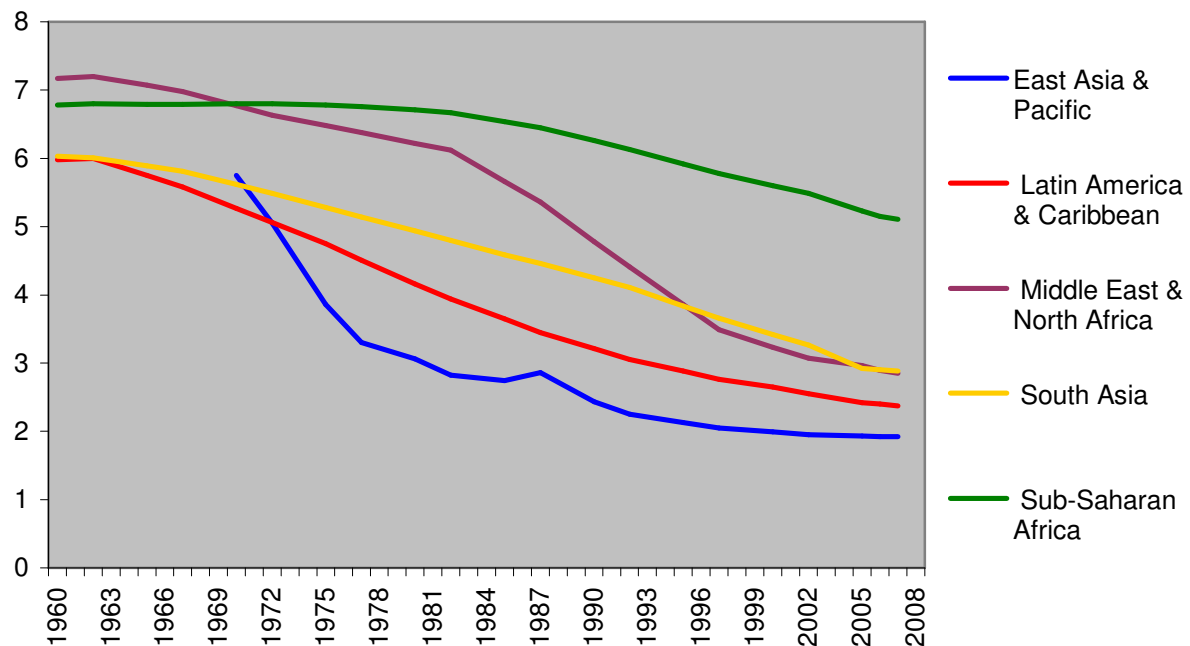


Figure 6 shows that in the early 1960s, women in all sub-regions of the Global South on average gave birth to six or more children. Forty years later, fertility rates have more than halved for all sub-regions except Sub-Saharan Africa. Women can now spend less time on child care and increasingly enter the labour force. No global data were found on the age of first birth, but it can be reasonably expected that on average women nowadays get their first child at a more advanced age than forty years ago, enabling them to further their education and gain working experience prior to motherhood. The economic progress of the Asian Tigers, for example, may not have been possible without increased labour force participation of women. Although women in Sub-Saharan Africa seem to combine child care with economic activities more than in other sub-regions (compare map 15 and 20), child care obligations probably affect the quality of their work in terms of productivity, income and status.

Figure 7: Adolescent fertility by sub-region, births per 1000 women aged 15-19, 1997-2007).
 Source: World Development Indicators.

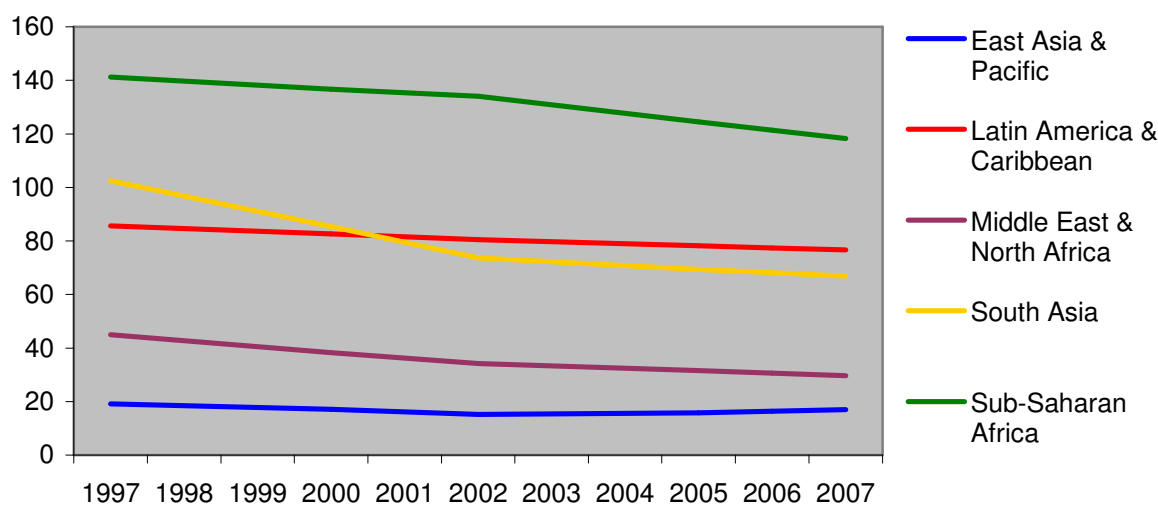


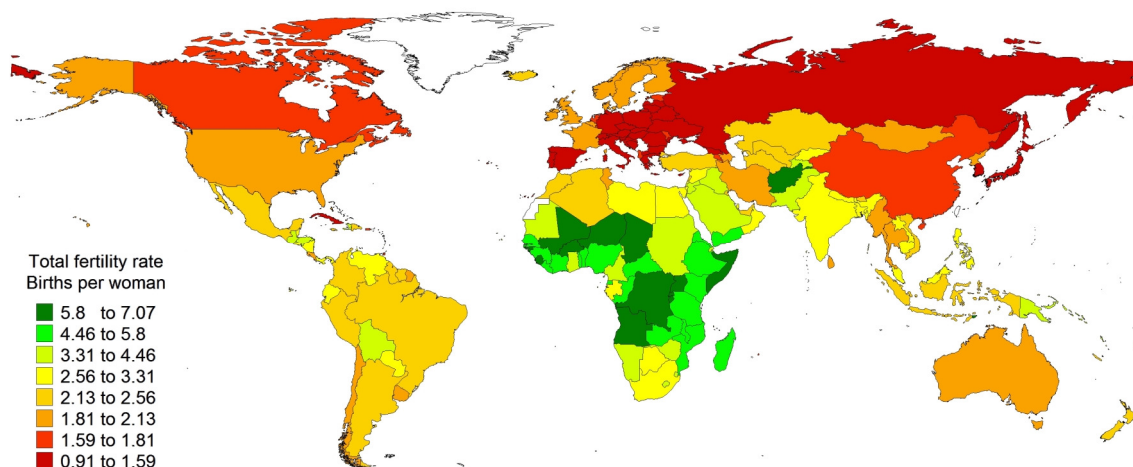
Figure 7 shows the sub-regional trend in adolescent fertility rates. Although the number of children per young woman aged 15 to 19 are decreasing in all sub-regions (except in East Asia in the last three years), the trend is less clear than for total fertility rates because the time span is much shorter (1997-2007). Adolescent fertility rates are highest in Sub-Saharan Africa, but in Latin America the highest proportion of children (3.2 percent) are given birth to by young women aged 15-19, and this figure has increased in the past ten years.¹⁴ Unfortunately, no global data on fertility rates of the 20-24 or 15-24 age groups were found.

In the world maps of fertility, Central African countries stand out as places where both total and adolescent fertility rates are still very high (see map 19 and 20). This can be considered an important barrier to quality labour force participation of women. Countries and regions with strong decreases in fertility - and increased opportunities for female labour force participation - are Iran, Thailand, South Korea, Tunisia and Costa Rica.¹⁵ No global data on rural versus urban fertility rates were found, but we can expect fertility rates to be higher in rural areas.

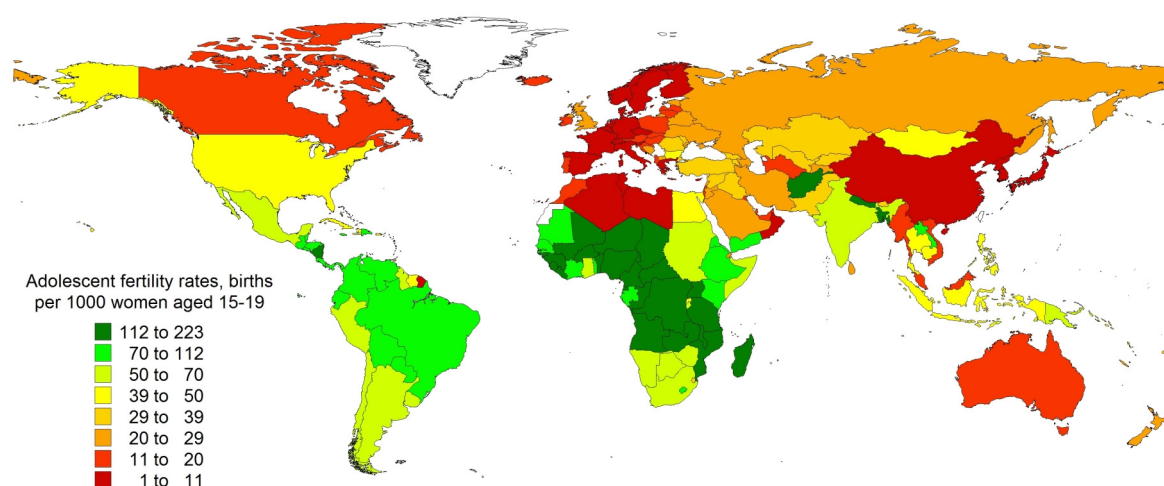
¹⁴ Source: World Development Indicators. See figure 11 in the web version of this paper.

¹⁵ Source: World Development Indicators. See map 29 in the web version of this paper.

Map 19: Total fertility rates by country (births per woman), 2007. Source: World Development Indicators.



Map 20: Adolescent fertility rates (births per 1000 women, 2006). Source: World Development Indicators.



So far, the focus of this paper has been mostly on the supply side of rural youth employment: who is available for work; what is their education level; and how large are women's constraints to labour force participation? In the sections below, the focus shifts to the demand side: in which sectors of the economy, and under which conditions, can rural youth find employment.

2.4 Underemployment

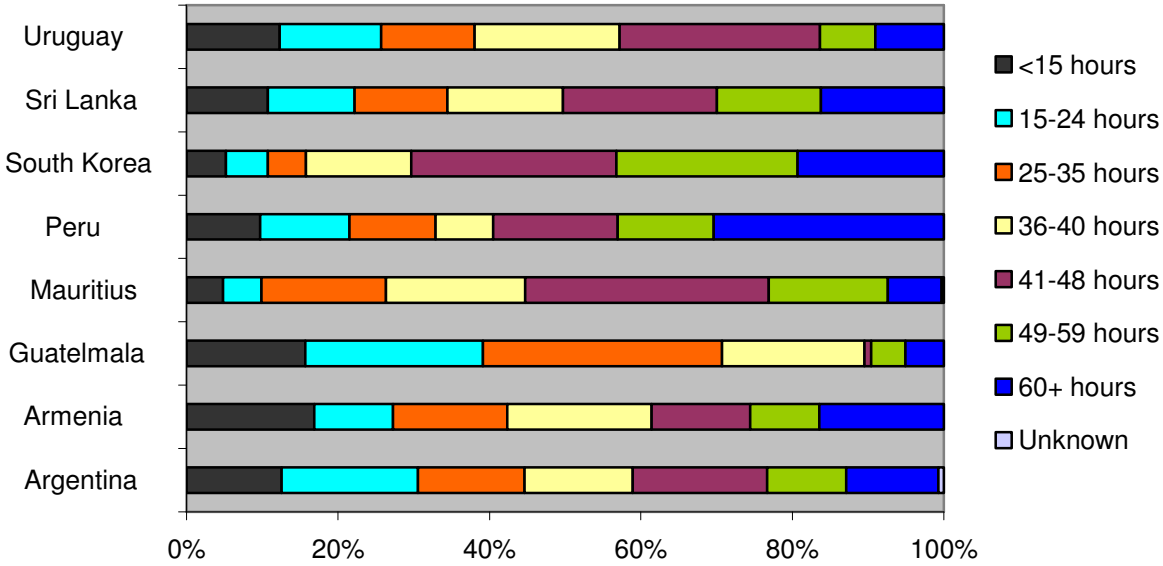
As we have seen above, unemployment rates are relatively low in rural areas of poor countries. The rural sector and agriculture specifically has historically been the sector that absorbs surplus labour, especially in regions where land scarcity is not a major issue. The problem is underemployment rather than unemployment. Hussmans et al (1990: 121) distinguish two types of underemployment: visible and invisible. Visible underemployment refers to “insufficiency in the volume of employment” (measured in time units), while characteristics of invisible underemployment are “low income, underutilisation of skills and low productivity.”

Visible underemployment in agriculture occurs principally when there is a strong seasonality in the agricultural cycle. In such farming systems, labour demand peaks only at certain periods in a year. During the slack season the labour resources of a large part of the rural population remain underutilised. Seasonal migration and in situ occupational mobility are important strategies to combat seasonal idleness. Such livelihood adaptations have existed for centuries, but do change over time. Visible underemployment may also be common in land-scarce areas where people have very small farms that do not require full-time attention.

Invisible underemployment in agriculture is a large problem in the poorest countries. This mainly results from low agricultural productivity (see below). Due to unfavourable agro-ecological conditions, low levels of technology, poor market access and lack of investment capital, the returns to farm labour are often low in developing countries. In this section, only visible underemployment will be discussed. Section 2.5 and 2.6 about 'quality of employment' and 'employment in agriculture' will go into more detail about the aspects that Hussmans et al (1990: 121) call 'invisible underemployment'.

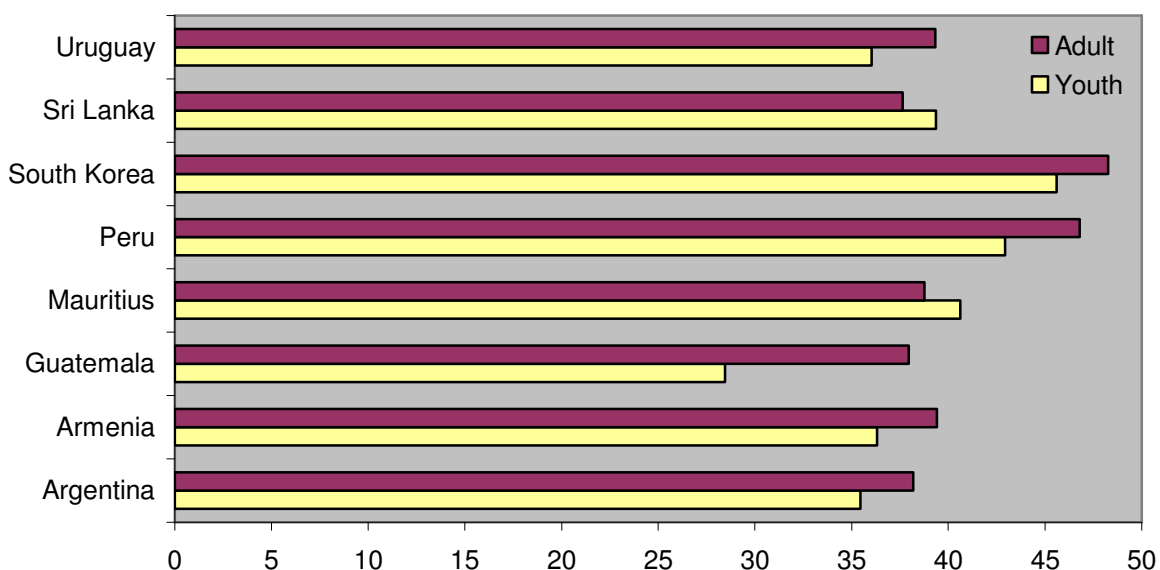
Global data on visible underemployment are hard to come by. The International Labour Organization (ILO) has a website called [LABORSTA](#) that contains data on a wide range of employment-related variables. This database has very useful information on individual countries, but its usefulness for cross-country and sub-regional analyses is limited because data availability and methods of measurement vary greatly between countries. Another disadvantage of LABORSTA is that countries in the Global South are somewhat underrepresented.

Figure 8: Weekly working hours of youth (15-24) in eight countries (2004). Source: LABORSTA.



Figures 8 and 9 show the weekly working hours of youth and adults in the eight countries for which comparable data were available. Figure 8 shows the percentage of the working population in each 'hours-of-work-category'. In figure 9 the total hours of work for adults and youth are plotted. To get these figures, the proportion of the workers in each hours-of-work-category was multiplied by the centre of the range (e.g. the centre of the range 25-35 hours is 30 hours). For the category 60+ hours, the value was taken to be 64 hours.

Figure 9: Weekly working hours of youth (15-24) and adults in eight countries (2004).
Source: LABORSTA.



In most countries for which data were available young workers had slightly shorter labour weeks than their adult counterparts. The exceptions are Sri Lanka and Mauritius where youth worked more hours per week than adults. If a person who works less than 24 hours per week is considered underemployed, then the percentage of youth underemployment ranges from ten percent in Mauritius to thirty-nine percent in Guatemala. At the other extreme, over forty percent of young workers in Peru and South Korea have labour weeks of more than 48 hours. Almost half the young people in the eight countries (unweighted average) works more than forty hours a week, and could be considered 'over-employed'. The figure is highest for young men who are working for others (paid employees).¹⁶ A tentative conclusion would be that 'over-employment' and exploitation of young workers is just as much a problem in developing countries as underemployment. Although 'over-employment' is not a problem specific to youth, the effect of very long working hours is probably more damaging for young people, especially those aged 15-18.

Other findings from the LABORSTA data on working hours are that young women are more likely to be underemployed in terms of working hours than young men and that paid employees have substantially longer working hours than the self-employed.¹⁷

2.5 Quality of Employment

The wellbeing of young rural people in developing countries and their contribution to development in their home countries depends only partly on the question *whether* they are employed. The *quality* of their employment is also of great influence, especially in economies with low rural youth employment rates. To assess trends and geographic distributions in quality of rural youth employment around the world, ideally we would need panel data on productivity, wage earnings, working conditions and indicators of social protection for a large number of countries, disaggregated according to age, locality (rural / urban) and preferably

¹⁶ Source: LABORSTA. See figure 12e in the web version of this paper.

¹⁷ Source: LABORSTA. See figure 12a-i in the web version of this paper.

also gender. Unfortunately, such data do not exist, as is also lamented in a recent report of the International Labour Organization (see box 3).

Box 3: Problems measuring quality of youth unemployment (ILO 2008, page 11)

"It remains a regrettable consequence of insufficient data availability and lack of age disaggregation for other indicators that so much attention is paid to the topic of youth **unemployment** (my emphasis), when equally, if not more important, is the topic of the **quality of work** (my emphasis) made available to young men and women. Rarely is sufficient data tabulated and disseminated at the country-level to provide the necessary proof that young people, especially young women, are particularly vulnerable to working under poor conditions. Indicators such as status in employment to tell us whether workers are engaged under wage and salaried arrangements or under more "vulnerable" statuses such as own-account workers or unpaid family workers; employment by sector for information on how many youth are working in the various sectors - agriculture, industry or services; hours of work; underemployment; share of young people with informal jobs; and others are needed to complete the portrait of youth labour market challenges."

An important aspect of quality employment is the level of income derived from work. The International Labour Organisation's website¹⁸ contains data on wage earnings for quite a large number of countries in the world, including some developing countries. A cross-country and trend analysis of wage levels should be possible in theory, but would be extremely time consuming and have a number of limitations. The data are presented in a very disaggregated way (but no distinction is made for wages in rural and urban areas); the methods of measurement vary; the categories vary; the time units vary (wage per hour, day, week, month) and wages are expressed in local currencies.

The Living Standard Measurement Surveys (LSMS) – which are discussed in more detail below – can probably serve to fill part of this data gap for a limited number of countries (around thirty). For some of these countries data are available at different points in time so it should be possible to also distract some changes over time. An advantage of the LSMS data sets is that they should allow for a disaggregation according to locality, age group *and* gender. Hence, comparisons can be made between for example young rural men and young rural women; young rural men and adult rural men; and between young rural women and young urban women.

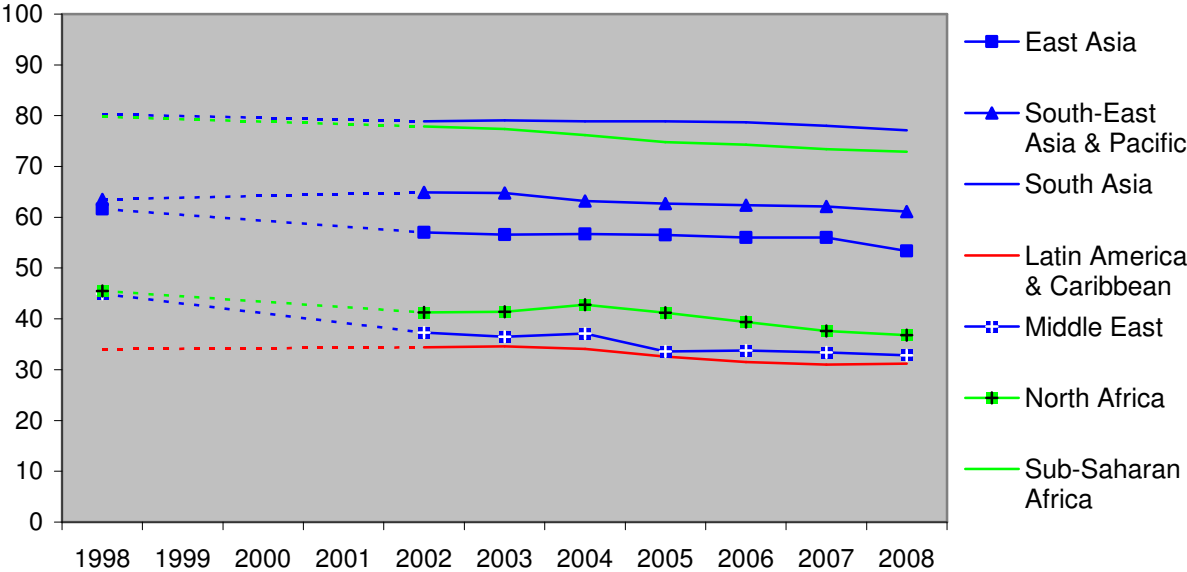
In the absence of global, disaggregated data for rural youth, it is still revealing to study some national and sub-regional level indicators of employment quality. In countries with low agricultural productivity, for example, youth employed in agriculture are less likely to make a decent living than in countries with high agricultural productivity. In the present section we look at the 'vulnerability' of employment (proportion of economically active population being paid employees, self-employed or contributing family labourers). The quality of employment in agriculture will be dealt with in a separate section (2.6).

The ILO report on Global Employment Trends, published in May 2009, has data on vulnerable employment at the sub-regional level (1998-2008). The World Development Indicators include vulnerable employment data at the country level (different years per country). In industrialized societies, to be self-employed can be quite positive as it is associated with independence ('to be your own boss'). In developing countries, on the other hand, being self-employed usually means being a small-scale farmer or earning a meagre income in the informal non-farm economy.

¹⁸ See <http://ilo.laborsta.org>

Figure 10 shows that the proportion of workers in vulnerable employment is highest in South Asia and Sub-Saharan Africa (around 75 percent), and lowest in Latin America, the Middle East and North Africa (around 35 percent). Between 1998 and 2008, vulnerable employment rates have decreased in all sub-regions, which means that the proportion of paid employees has increased. This can be a positive development if it means that people have moved from the informal sector (without labour rights) to the formal economy (with some degree of social security). It would be a more negative development if it is a result of proletarianization, for example when small farmers lose their autonomy because they are forced to sell their land and start working for large-scale farmers.

Figure 10: Vulnerable employment rates¹⁹ by sub-region (1998-2008). Source: ILO 2009.



The strongest decline in vulnerable employment was registered in the Middle East, North Africa and East Asia. The ILO report also contains gender-specific data on vulnerable employment. In all sub-regions except Latin America & the Caribbean, women are more often vulnerably employed than men. The largest difference in vulnerable employment rates between men and women is found in the Middle East, North Africa and Sub-Saharan Africa. In North Africa, the gender gap has widened substantially over the past ten years (ILO 2009).

It should be noted that changes in vulnerable employment rates are probably less relevant in rural contexts than in urban ones. In rural areas, especially in Sub-Saharan Africa, self-employment in agriculture is the most common occupation. Policies to improve rural youth employment tend to focus on developing entrepreneurship (self-employment). If such policies are successful, they do not necessarily cause a decline in vulnerable employment rates. This would only be the case if successful rural entrepreneurs increase their scale of production and start contracting employees.

2.6 Quality of Employment in Agriculture

Most rural people in developing countries still depend on agriculture for their livelihood (see section 2.2), and they will continue to do so in the absence of any meaningful industrial

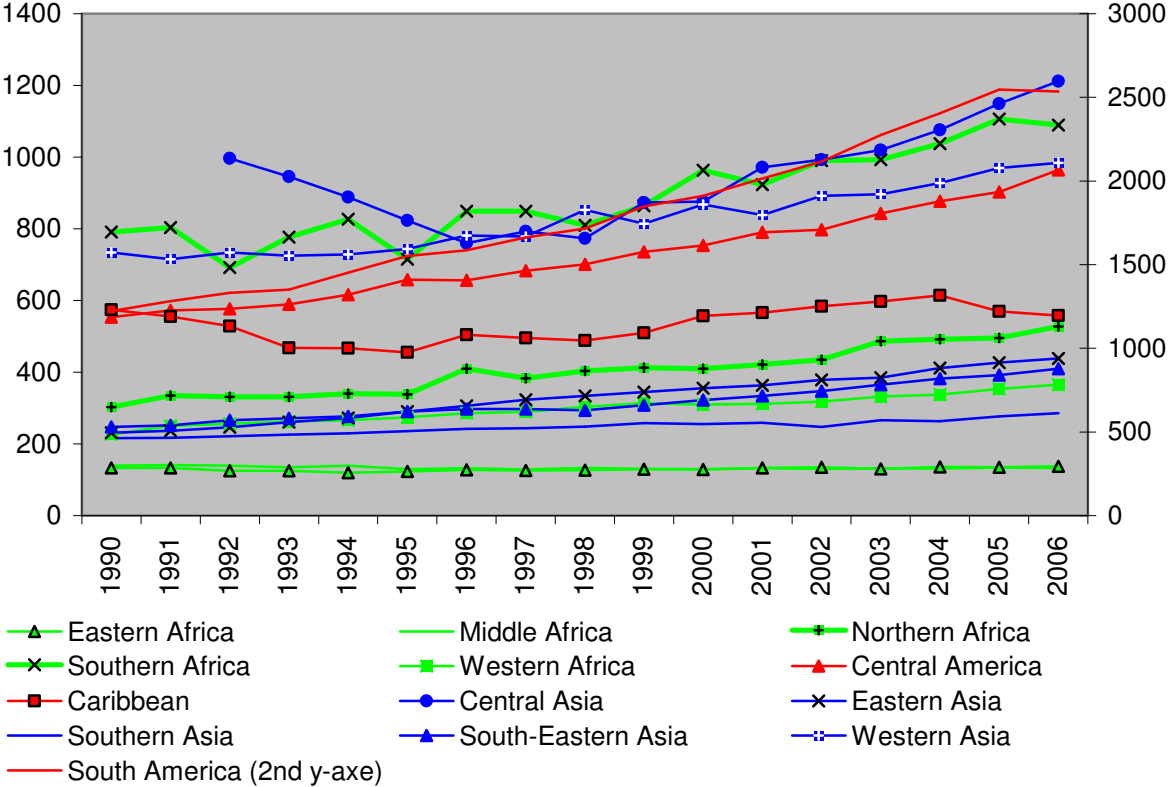
¹⁹ The vulnerable employment rate is calculated as the self-employed plus contributing family labour divided by total employment.

development. A key factor in improving the quality of employment in rural areas would be to increase agricultural productivity in a socially and environmentally sustainable way. Young people in less developed countries are generally better educated than their parents' generation (see section 2.3.3) and are likely to be more open to change. Therefore, focussing agricultural extension efforts on young people (like it is already done in some places) seems promising. Quality youth employment in agriculture is only possible if young people can make a decent living by working the land, be it as farm labourer, contributing family worker or independent farmer.

2.6.1 Agricultural Productivity

Figure 11 shows the trend in agricultural productivity per agricultural capita between 1990 and 2006. A few interesting observations can be made from this figure. Firstly, agricultural productivity is increasing in all sub-regions, but in the Caribbean, East Africa and Middle Africa the improvements are marginal. Secondly, agricultural productivity is much higher in Southern Africa than in North and West Africa and especially East and Middle Africa. Thirdly, agricultural productivity in East Asia is quite low. This is a bit surprising because East Asia, especially China, has experienced very high economic growth rates in the past two decades.

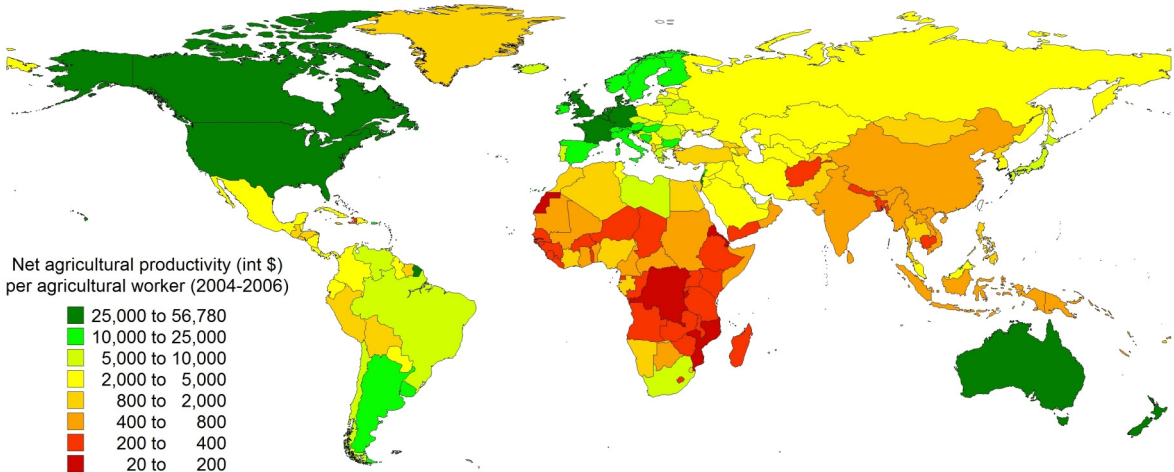
Figure 11: Agricultural productivity (international \$), 1990-2006. Calculated as net agricultural production divided by the agricultural population. Note: South America on second y-axis. Source: FAO-STAT.



The world map of agricultural productivity (map 21), expressed in monetary terms, confirms that Africa and Asia suffer from particularly low returns to labour. In Latin America agricultural productivity is much higher. The figures for Argentina and Brazil, for example,

are similar to European countries. In countries like Malawi, Mozambique, Angola, Ethiopia and Burkina Faso, on the other hand, the earnings per person employed in agriculture are below 300 dollars a year. For rural youth, this is hardly an incentive to work the land, but they have little choice because there are few alternatives outside agriculture.

Map 21: Net agricultural productivity per person employed in agriculture (2004-2006). Source: FAO-STAT.



The FAO-STAT website contains country-level data on agricultural productivity for the 1990-2006 period.²⁰ At a global level, some degree of convergence is discernible between the North and the South. Productivity has increased substantially in Latin America and most of Asia (exceptions: Mongolia and Afghanistan). The trend for Africa is quite diverse: from very positive (e.g. Angola, Ethiopia, Algeria and Ghana) to very negative (e.g. Congo, Madagascar, Namibia and Botswana).

2.6.2 Constraints to Agricultural Productivity Growth

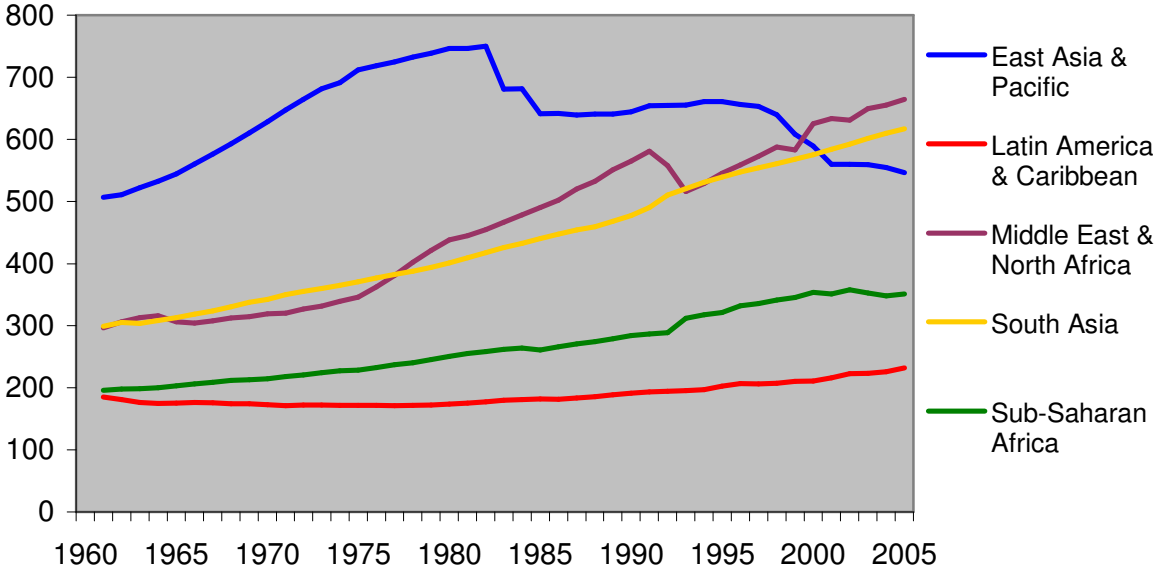
For agricultural development, four factors of production are crucial: land, labour, capital and knowledge (including management and entrepreneurship skills). In earlier sections we have already looked at patterns and trends of labour force participation, unemployment rates and education levels. In this section we first discuss the factor land and then the factor capital. Figure 12 and map 22 and 23 show the patterns and trends in rural population density per square kilometre of arable land at the sub-regional and country level. It should be noted that the surface of arable land is not static: it can increase over time when new lands are made brought into cultivation. This measure is an indicator of the availability of land, but does not necessarily reflect the ease of access to land by different groups in the society. In Brazil, for example, rural population density per hectare of arable land is very low, but still the country counts millions of landless farmers. This has to do with unequal distribution of land, and tenure systems that are detrimental to the interests of the rural poor and women specifically. While many national legal codes have incorporated provisions acknowledging gender equality in relation to access and ownership of land and other productive resources, women’s rights to own resources on equal conditions to those of men are in many countries repeatedly disregarded or overlooked. There can also be large regional and cultural differences in the 'rules of the game' regulating access to farm land by youth. Traditionally, young men in many Sub-Saharan countries, for example, are obliged to farm on their father's land even after

²⁰ Source: FAO-STAT. See map 34 in the web version of this report.

marriage. Even if though social systems and traditional customs are changing, they are still relevant in many countries.

In South Asia, East Asia and the Middle East rural population densities per square kilometre of arable land are highest (figure 12) and the availability of land to farm is limited there. An important difference between East Asia and the other two sub-regions is that in East Asia, rural population densities are decreasing because of a rapid urbanization and possibly because formerly unsuitable lands are being made suitable for cultivation. As shown in section 2.2, however, the agricultural population in East Asia is growing more rapidly than the rural population so the seemingly decreasing pressure on farmland (as expressed in decreasing rural population densities) may not reflect the situation for farmers on the ground. In the Middle East and South Asia, the population density per square kilometre of arable land has doubled over the past half century, and in Sub-Saharan Africa the increase has been very substantial, too.

Figure 12: Rural population density by sub-region (1961-2005). Note: measured as rural population per square kilometre of arable land.²¹ Source: World Development Indicators.



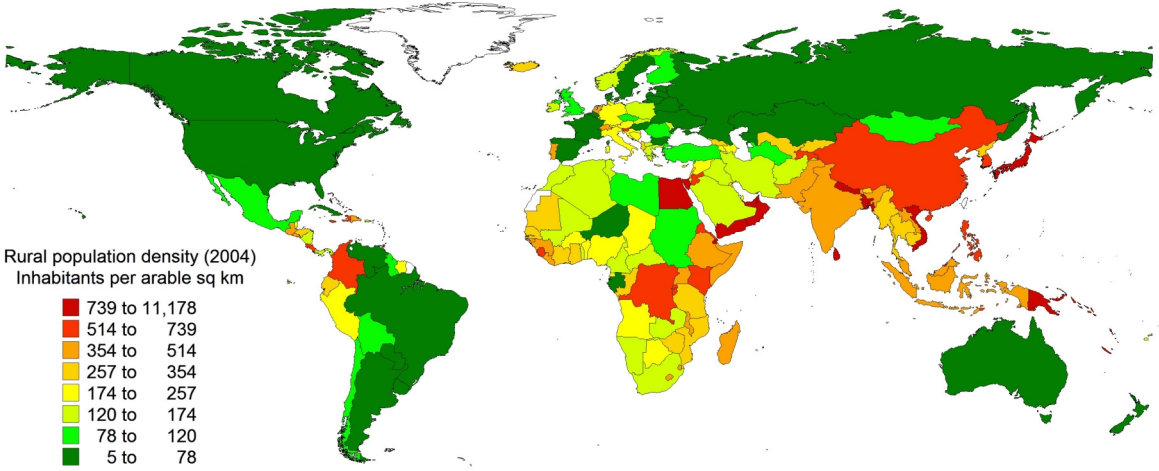
The world map of rural population density (map 22) clearly depicts South Asia, East Asia and Southeast Asia as the sub-regions with most rural people per square kilometre of arable land. Looking at the trends (map 23), the situation becomes increasingly severe in South Asia. This is partly due to the fact that urbanization in South Asia occurs at a slower pace than in other sub-regions.²² At the sub-regional level (figure 12) the rural population per square kilometre of arable land is quite low in Sub-Saharan Africa. However, map 22 shows that the situation in East Africa is quite similar to much of South and Southeast Asia. The rapid increase in rural population in East Africa is primarily caused by high fertility rates and rapid population growth. Figure 12 shows that rural population densities per square kilometre of arable land are high in the Middle East and North Africa. Looking at map 22, it becomes clear that the

²¹ FAO definition of arable land: Arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for “Arable land” are not meant to indicate the amount of land that is potentially cultivable. Source: FAO-STAT glossary (<http://faostat.fao.org/site/375/default.aspx>).

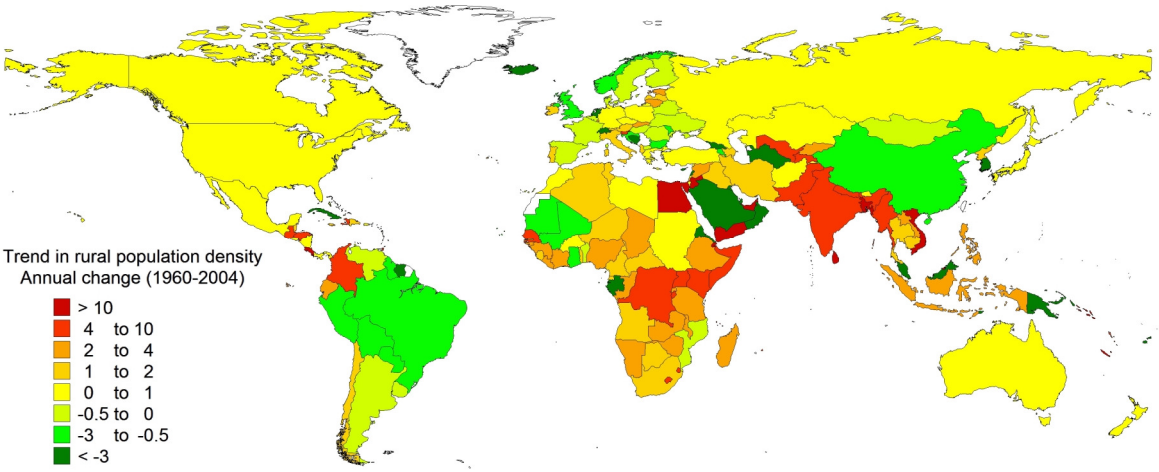
²² Source: FAO-STAT. See figure 3 and map 3 in the web version of this report.

problem is mainly concentrated in Egypt. Most other countries in this sub-region have much lower rural population densities.

Map 22: Rural population per square km of arable land (2004). Source: World Development Indicators.

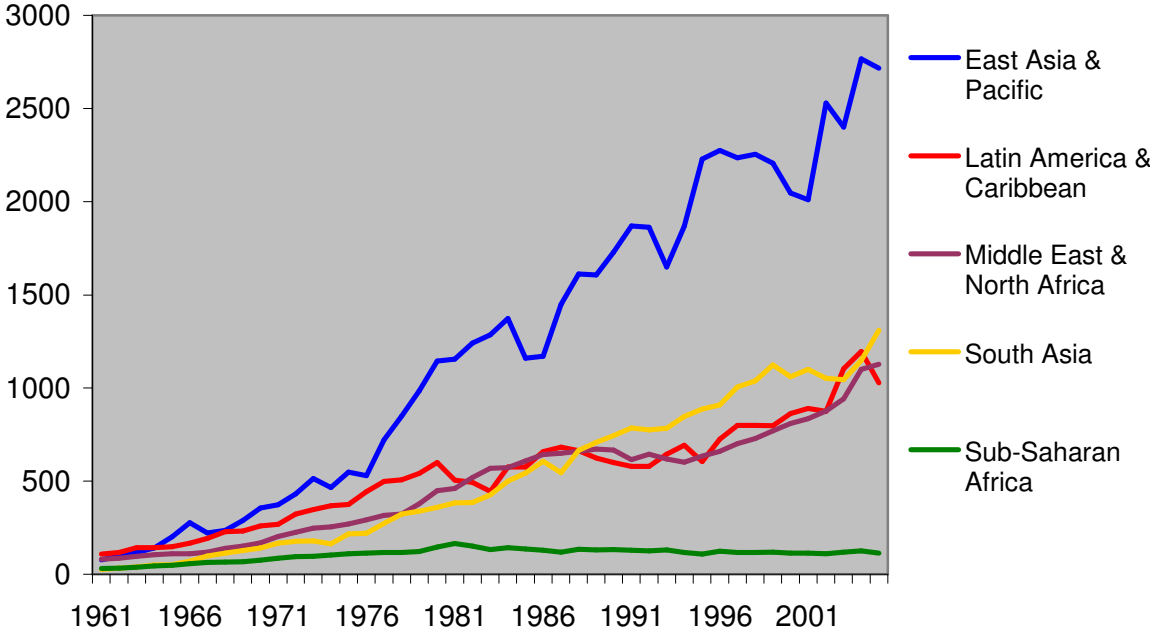


Map 23: Trend in rural population per square km of arable land (1960-2004). Source: World Development Indicators.

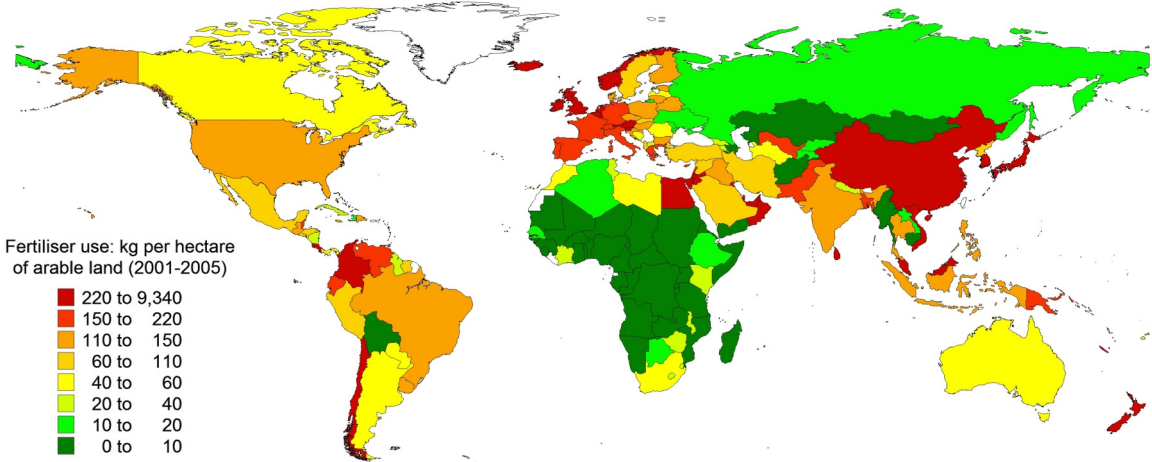


Besides access to farm land, another important factor of agricultural production is access to capital. In the absence of exact measures of capital use in agriculture, figure 13 and map 24 show the sub-regional and country-level patterns and trends in fertiliser use. Additional data on capital inputs (like machinery) are available on the FAO-STAT website, but the analysis here is limited to fertiliser use. In the early 1960s, almost no inorganic fertiliser was used in the Global South. In the past half century, fertiliser use has increased rapidly in all sub-regions (especially East Asia and the Pacific), but not in Sub-Saharan Africa. Comparing figure 15 and 13, it seems that the sub-regions with most agricultural growth are also the sub-regions with the largest increase in fertiliser use (and probably increased capital input in general). It seems reasonable to state that low agricultural productivity in Sub-Saharan Africa, and hence, poor quality of employment in agriculture, can partly be explained by lack of capital to boost yields and earnings from the land.

Figure 13: Fertilizer utilization (100 grams per hectare of arable land) (1961-2005). Source: World Development Indicators.



Map 24: Fertiliser use by country, expressed in kg per hectare of arable land (average 2001-2005). Source: World Development Indicators.

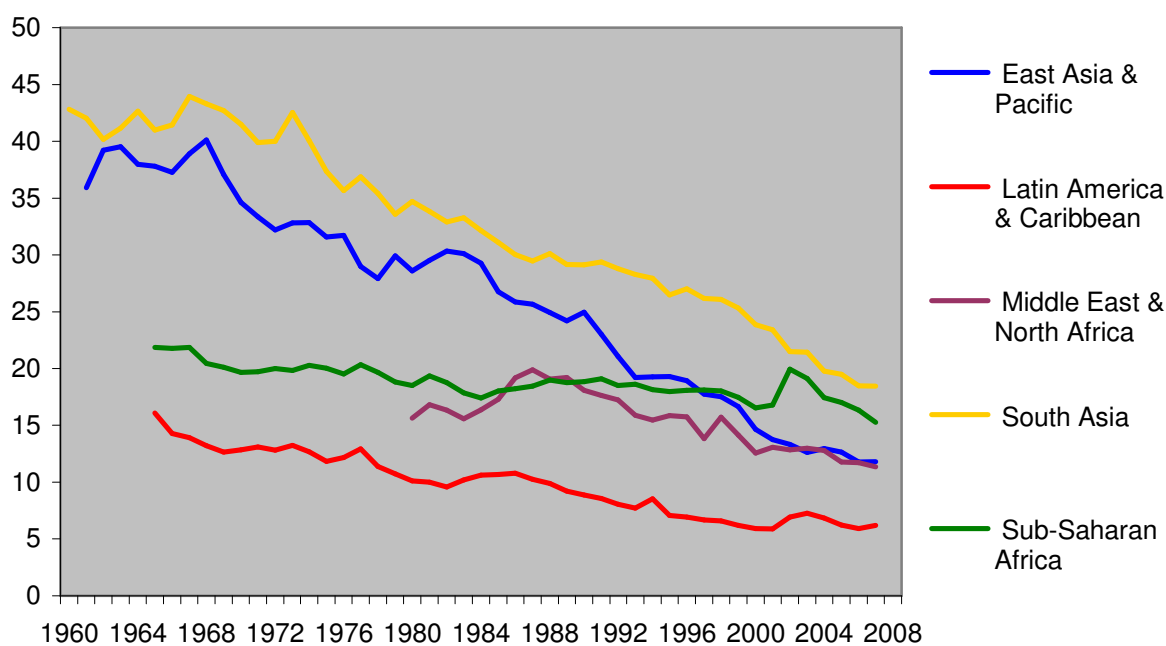


Quality employment in agriculture is more than just good yields and proper earnings. If the transition to more productive agricultural systems requires a concentration of productive assets (land, machinery, labour) in the hands of few, the effects on the quality of employment are likely to be negative. In most of Sub-Saharan Africa, the agricultural labour force primarily consists of small-scale farmers cultivating land over which they have usufruct rights. The small scale of farm operations and the limited availability of capital are considered important causes of low agricultural productivity in Sub-Saharan Africa. Privatization of farm land, which is propagated by some international organisations and implemented by some national governments, can indeed create conditions for increased agricultural productivity. However, it remains to be seen whether this will also have a positive effect on the *quality of employment*. The work satisfaction of an independent farmer, no matter how small his scale of operation, is quite different from that of a farm labourer who has lost his or her autonomy over the cultivation of the land.

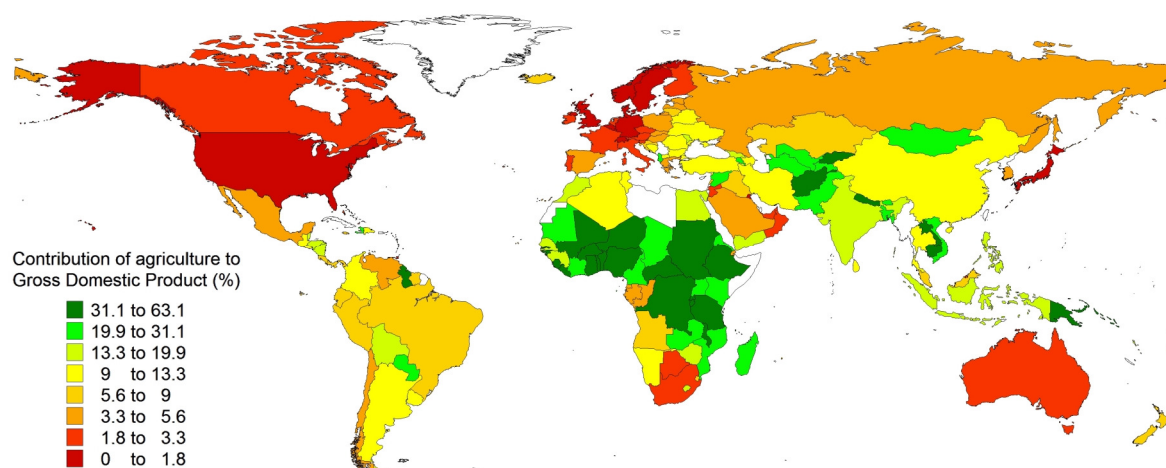
2.7 Non-Agricultural Employment

Rural youth's prospects of finding decent work do not depend on working conditions in agriculture alone. In more diversified economies, rural youngsters have better options to find work outside of agriculture, especially if they have the required education and / or vocational skills. Such employment opportunities will often be located at a distance from their home villages. Thus, apart from education and skills, rural youth often need a degree of freedom and the means to migrate in order to access non-agricultural employment opportunities. Figure 14 and map 25 show the patterns and trends in the contribution of agriculture to sub-regions' and countries' Gross Domestic Product (GDP). These figures are a rough indication of the extent to which rural youth have an alternative to working in agriculture. Figure 14 shows that the de-agrarianisation of the economy has been particularly slow in Sub-Saharan Africa. In the 1960s, agriculture's contribution to GDP was much higher in South and East Asia than in Sub-Saharan Africa. Despite a more positive trend in agricultural productivity, the contribution of agriculture to GDP has decreased substantially in South and East Asia, meaning that even higher growth was recorded in the non-farm economy. The opposite has been the case for Sub-Saharan Africa: despite limited agricultural growth, the contribution of agriculture to GDP has remained high because other sectors of the economy also experienced little growth. Historically, agricultural productivity growth has preceded substantial decreases in agriculture's contribution to GDP. This has been the case in Europe and North-America, but also in Latin America. Promoting agricultural development seems - somewhat paradoxically - a *sine qua non* for Sub-Saharan African countries to diversify their economies in the long run. As mentioned earlier in this paper, focussing agricultural extension services on young people is likely to have a very positive effect because young people have higher levels of education and are generally more open to change.

Figure 14: Contribution of agriculture to the Gross Domestic Product (GDP) by sub-region, 1960-2007 (%). Source: World Development Indicators.



Map 25: Contribution of agriculture to GDP by country, average 2003-2007 (%). Source: World Development Indicators.

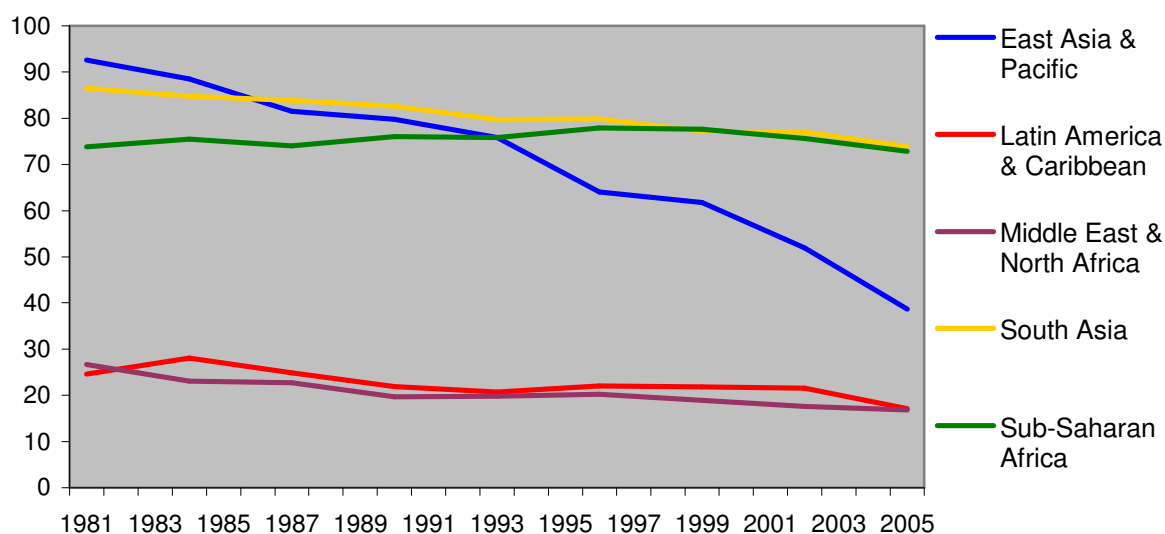


2.8 Poverty

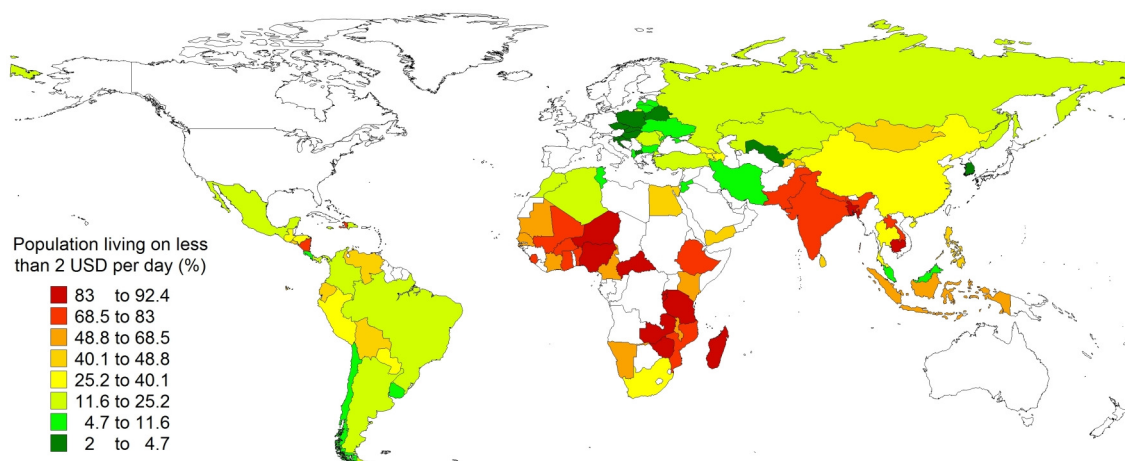
Decent employment opportunities are scarce for rural youth living in poor countries, and especially in countries with a large gap between rural and urban poverty rates. Figure 15 below shows the trends in the proportion of the population living on less than 2 USD a day for different sub-regions in the Global South. The figure confirms the findings from the rest of this paper that the situation is particularly precarious in Sub-Saharan Africa and South Asia. Poverty rates are much lower in Latin America, North Africa and the Middle East. East Asia has witnessed a very substantial reduction in poverty rates. The world map of poverty (map 26) shows a similar picture. Apart from the international standard poverty line, individual countries also use national poverty lines, and separate data are available for rural and urban poverty in a large number of countries. Map 27 shows the gap between rural and urban poverty rates.²³ An important finding from these maps is that the poorest countries (in Sub-Saharan Africa and South Asia) have a much smaller gap between rural and urban poverty rates than countries with lower poverty rates (in Latin America, North Africa and the Middle East). In other words, in the poorest countries poverty rates are high in both rural and urban areas, while in less poor countries, poverty is mostly concentrated in rural areas. The situation for rural youth is worst in countries that combine high poverty rates with large rural-urban poverty gaps. Examples of such countries are Zimbabwe, Ghana, Nicaragua, Nepal and Cambodia (see map 26 and 27).

²³ In the web version of this paper, map 42 and 43 depict rural and urban poverty rates separately.

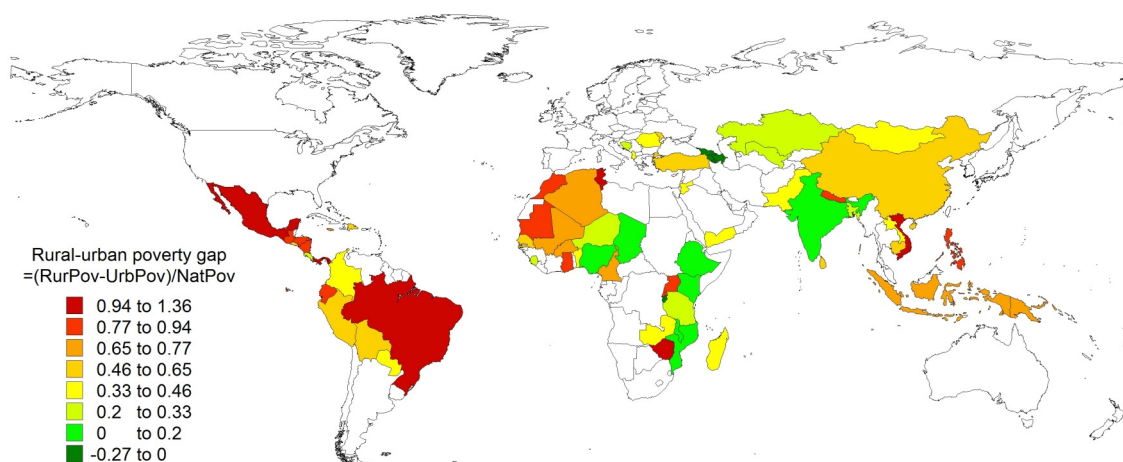
Figure 15: Proportion of population living on less than 2 US\$ per day, 1981-2005 (%). Source: World Development Indicators.



Map 26: Poverty: proportion of population living on less than 2 US dollars per day. Note: survey years vary. Source: World Development Indicators.



Map 27: Rural-urban poverty gap, calculated as: $(\% \text{ rural poor} - \% \text{ urban poor}) / \% \text{ national poor}$. Note: survey years vary. Source: World Development Indicators.



3. Case Study: Nicaragua

So far, this paper has used global data at the sub-regional and country level to describe historical trends and geographic patterns in social-demographic and economic variables that collectively provide a global view on the employment situation of rural youth in developing countries. A problem of most of these variables, however, is that they are not sufficiently disaggregated according to locality (rural / urban), age group (youth / adult) and gender. Although such more aggregated data are informative in their own right, there is a need for more detailed data and analyses in the domain of rural youth employment. Such detailed data are available for a limited number of developing countries that have conducted Living Standard Measurement Studies (LSMS) since 1985. So far, twenty-nine countries in Africa, Latin America, Asia and Eastern Europe have conducted such surveys (see box 4). The LSMS project was initiated by the World Bank in collaboration with national statistical agencies in developing countries, with the objective quoted in box 4 below.

Box 4: Introduction to the World Bank's Living Standard Measurement Study

"The Living Standards Measurement Study (LSMS) was established by the Development Economics Research Group (DECRG) to explore ways of improving the type and quality of household data collected by statistical offices in developing countries. Its goal is to foster increased use of household data as a basis for policy decision-making. Specifically, the LSMS is working to develop new methods to monitor progress in raising levels of living, to identify the consequences for households of past and proposed government policies, and to improve communications between survey statisticians, analysts, and policy makers."²⁴

List of LSMS countries: Albania, Azerbaijan, Brazil, Bulgaria, China, Côte d'Ivoire, Ecuador, Ghana, Guatemala, Guyana, India, Jamaica, Kazakhstan, Kyrgyzstan, Malawi, Morocco, Nepal, Nicaragua, Pakistan, Panama, Papua Guinea, Peru, Romania, Serbia, South Africa, Tajikistan, Tanzania, Timor-Leste and Viet Nam.²⁵

To get an impression of the possibilities of LSMS in advancing our knowledge about rural youth employment in developing countries, data for one country (Nicaragua) were obtained and analysed. Though the last round of the "Encuesta Nacional de Hogares sobre Medición de Nivel de Vida" was conducted in 2005, only data from 2001 is available online. The LSMS file contains data on 22,810 individual of which 10,755 (47.2 percent) were living in rural areas. The number of rural youth, aged 15-24, amounted to 2,473 (1,323 male and 1,150 female). For each individual in the survey, which included children, the exact age is known so analyses can distinguish more detailed age groups (e.g. adolescents, young adults, etc).

The database covers a very large number of variables, including over one hundred in the area of 'employment' (excluding specific data on, for example, agricultural production). This allows for a detailed analysis, but the 'rawness' of the data also makes analysis time-consuming, especially in a cross-country analysis. The Living Standard Measurement Studies are meant to facilitate comparative analyses including several countries, and the questionnaires used are quite standardised, but making the databases comparable involves a lot of data cleaning. An example of the 'rawness' of the data concerns wage earnings. People can have different jobs for which the earnings must be summed up; they could express (per job) their earnings in days, weeks, months, years; if a person has expressed his earnings in a daily, weekly or monthly wages, he was asked to estimate the number of days, weeks or months he would work in a year. The situation for own-account workers is different again.

²⁴ Source: <http://www.econ.worldbank.org>

²⁵ Source: <http://iresearch.worldbank.org/lsmssurveyFinder.htm>

Hence, the level of detail and disaggregation is an important asset, but at the same time a limitation of the LSMS.

Table 1 to 6 summarize a selection of the employment data from Nicaragua's 2001 LSMS. The data are disaggregated according to locality (rural / urban), age group (youth / adult) and gender (male / female), but it should be noted that alternative aggregations are possible, for example according to education level, marital status, parenthood, etc. The tables shed light on the employment situation of rural youth vis-à-vis urban youth and rural adults. Moreover, important gender differences in employment status and barriers to decent work come to the fore. The findings from the tables are summarized below each table:

Table 1: Proportion of people per age group, locality and gender that worked in past week (%) (N=12,177)

	Youth (15-24)				Adult (25-59)			
	Urban		Rural Youth		Urban		Rural	
	M	F	M	F	M	F	M	F
Worked	55.0	29.3	82.1	20.1	84.5	59.2	92.0	33.6
Did not work	44.9	70.7	17.8	79.8	15.4	40.8	8.0	66.4
Missing values	0.1	0	0.1	0.1	0.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Hogares sobre Medición de Nivel de Vida 2001, Instituto Nacional de Información de Desarrollo

- **More rural than urban youth had worked** in the week prior to the survey.
- **More rural adults than rural youth** had worked in the week prior to the survey.
- Much **more young rural men than young rural women** had worked in the week prior to the survey.

Table 2: Proportion of people – among those who did not work – per age group, locality and gender that looked for work in the past week (%) (N=4,798)

	Youth (15-24)				Adult (25-59)			
	Urban		Rural Youth		Urban		Rural	
	M	F	M	F	M	F	M	F
Looked for work	10.0	3.7	8.9	1.8	31.4	5.6	18.2	0.9
Did not look for work	89.8	96.3	90.7	98.1	67.7	94.4	81.8	99.1
Missing values	0.2	0.0	0.5	0.1	0.9	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Hogares sobre Medición de Nivel de Vida 2001, Instituto Nacional de Información de Desarrollo

- Within the group of youth that did not work, urban youth had been (slightly) more active in looking for work than rural youth
- Within the group of rural people that did not work, **adults had been more active in looking for work than youth**
- **Young rural men** that did not work had been much **more active in looking for work than rural women** that did not work (8,9 against 1,8).

Table 3: Reasons why unemployed people did not look for work by age group, locality and gender (%) (N=4,523)

	Youth (15-24)				Adult (25-59)			
	Urban		Rural Youth		Urban		Rural	
	M	F	M	F	M	F	M	F
Household duties	0.6	26.2	2.1	55.2	2.6	65.8	4.9	81.3
Studying / young age	64.8	50.1	46.7	19.0	3.2	0.9	1.2	0.3
Thinks there is no work	13.0	5.6	19.0	7.3	21.9	5.3	14.8	4.0
Sickness or accident	2.8	1.0	5.6	2.0	16.1	10.4	22.2	4.6
Awaiting seasonal work	1.7	0.0	11.3	0.3	6.5	0.3	21.0	0.8
Tired of searching for work	3.4	1.9	3.6	1.2	9.7	2.6	7.4	0.3
Has nowhere to leave the kids	0.2	8.0	0.5	9.2	0.0	5.3	0.0	5.0
Permanent incapacity to work	1.1	1.2	3.1	0.6	7.1	2.4	9.9	0.5
Awaiting result job application	4.0	1.3	2.6	0.2	11.6	0.5	2.5	0.0
Already found a job	3.0	0.3	2.1	0.1	4.5	0.6	9.9	0.1
Has temporary work	0.9	0.2	0.5	0.0	4.5	0.8	0.0	0.4
Pregnancy	0.0	2.7	0.0	2.4	0.0	0.8	0.0	0.8
Retired	0.0	0.0	0.0	0.0	4.5	0.9	1.2	0.0
Old age	0.0	0.0	0.0	0.1	0.6	1.2	1.2	0.8
Living on rent	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Other reason	4.3	1.4	2.6	2.2	5.8	2.1	3.7	1.1
Missing values	0.2	0.0	0.5	0.1	1.3	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Hogares sobre Medición de Nivel de Vida 2001, Instituto Nacional de Información de Desarrollo

- The reason why most **young rural women** did not look for work in the past week is in most cases related to **household duties**. Other important care-related reasons for young rural women were 'having nowhere to leave the children' and pregnancy.
- For **young rural women household duties** were more often a reason not to look for work than for **young urban women**, but less than for **adult rural women**.
- In **urban areas**, the major reason why young men and women did not look for work is that they are **attending school**. The same applies to **young rural men**.
- The second most important reason for **young rural men not to look for work is that they think that there is no work** (19.0%), and an additional 3.6% stated that they were tired of searching for work. For adult men in urban areas these reasons were also very common (21.9 and 9.7 percent respectively).

Table 4: Reasons why last job ended by age group, locality and gender (%) (N=1,691)

	Youth (15-24)				Adult (25-59)			
	Urban		Rural Youth		Urban		Rural	
	M	F	M	F	M	F	M	F
Household duties	0.6	37.0	1.2	35.0	2.1	36.5	2.4	48.5
End of contract	28.7	13.5	17.9	8.5	27.3	7.4	18.1	4.3
Finished seasonal work	10.2	2.5	52.4	10.2	8.2	1.3	28.9	10.4
Sickness	3.6	8.0	4.8	6.8	13.4	18.6	22.9	14.6
Low earnings	11.4	9.5	3.6	9.6	8.8	8.5	8.4	7.0
Fired	13.8	6.5	6.0	2.8	7.2	5.7	6.0	2.7
Did not like the work	6.0	6.0	4.8	8.5	3.6	3.1	1.2	2.4
Studies	12.6	6.0	2.4	2.8	0.0	0.7	1.2	0.0
Company went bankrupt	3.6	0.5	1.2	1.1	7.2	3.9	3.6	2.1
Reduction of employees	1.8	2.0	2.4	.6	3.6	1.5	1.2	1.2
Maltreatment	1.2	3.0	0.0	1.1	1.5	3.3	0.0	0.6
Public sector reform	0.0	0.0	0.0	0.0	4.1	2.0	0.0	0.6
Retired (pension)	0.0	0.0	0.0	0.0	2.6	1.3	2.4	0.0
Old age	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.3
Other reason	6.0	5.5	2.4	12.4	9.3	5.5	3.6	5.2
Missing values	0.6	0.0	1.2	0.6	1.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Hogares sobre Medición de Nivel de Vida 2001, Instituto Nacional de Información de Desarrollo

- Within the group of people that worked before and had lost their job, both young rural and young urban **women mostly stopped working because of household duties**. The same applies to adult women in rural and urban areas.
- **Young rural men** were mostly forced to discontinue their last job because their work was **seasonal**. This problem was much more common in rural than in urban areas, and youth were more often affected than adults

Table 5: Employment status by age group, locality and gender (%) (N=7,324)

	Youth (15-24)				Adult (25-59)			
	Urban		Rural Youth		Urban		Rural	
	M	F	M	F	M	F	M	F
Labourer	58.8	59.6	13.6	46.8	56.0	50.1	18.4	29.2
Own account worker	10.0	13.0	10.2	11.6	25.7	39.5	45.2	46.9
Unpaid (family) worker	19.5	24.8	47.5	35.2	2.3	6.1	6.6	15.6
Day-wager	9.5	2.2	26.7	5.6	5.1	0.7	18.0	5.5
Entrepreneur	1.6	0.2	2.0	0.0	10.6	3.6	11.7	2.6
Cooperative member	0.1	0.0	0.0	0.4	0.0	0.0	0.1	0.0
Other	0.3	0.0	0.0	0.0	0.2	0.1	0.0	0.2
Missing values	0.1	0.2	0.1	0.4	0.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Hogares sobre Medición de Nivel de Vida 2001, Instituto Nacional de Información de Desarrollo

- **Unpaid work (usually in a family setup)** is much more common among rural youth than among urban youth, and among young people it is more common than among adults.

- **Rural adults are mostly 'own account workers'** and they are often assisted by the rural youth (as unpaid family worker). The same is true in urban areas, but to a lesser extent.
- In **urban areas, most people work as labourers**, both men and women, and young and old.
- An interesting difference between young rural men and young rural women is that **young women are much more often employed as labourers**. Many young rural men work as 'jornaleros' (day-wagers), a type of labour with very low job security.

Table 6: Social security membership by age group, locality and gender (%) (N=7,324)

	Youth (15-24)				Adult (25-59)			
	Urban		Rural Youth		Urban		Rural	
	M	F	M	F	M	F	M	F
Works with social security	15.3	19.3	3.4	10.8	24.6	25.7	6.2	10.7
Works without social security	84.6	80.4	96.5	88.8	75.2	74.3	93.8	89.3
Missing values	0.1	0.2	0.1	0.4	0.2	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Hogares sobre Medición de Nivel de Vida 2001, Instituto Nacional de Información de Desarrollo

- Whatever their age is, **rural workers are less likely to be covered by social security** schemes (usually pension) than workers living in urban areas.
- In both urban and rural areas and among youth and adults, **working women are more often covered by social security** than working men.
- Young workers are less often covered by social security than adult workers, particularly in urban areas.

The data presented for Nicaragua primarily served as an example to show what kind of analyses could be done with the Living Standard Measurement Studies. The tables are descriptive in nature, but more advanced statistical analyses could be done with the data, depending on the specific research question or policy objective that needs to be addressed. The findings for Nicaragua show that there are important differences between youth and adults, rural and urban areas and especially between men and women in terms of employment status and barriers to decent work. To summarize, rural youth are less often attending school than urban youth, and working rural youth tend to be employed under more vulnerable conditions than urban youth and rural adults. Moreover, many young rural women's labour force participation is limited because of domestic tasks.

4. Conclusions

The aim of this paper was to assess the availability of statistical data that are useful to researchers and policy makers dealing with rural youth employment in developing countries, and to present a first analysis of these data. In research and policy dealing with youth employment the focus has primarily been on formal employment in the non-agricultural economy. In this paper, the emphasis lies more on data that are relevant for youth employed in agriculture, which in most cases involves family labour or own-account workers. Following the limited literature on rural youth employment, a distinction was made between quantitative aspects of (un)employment and variables that reveal something about the quality of employment and barriers to decent work. The analytical approach was to study historical

trends at the sub-regional level and geographic distributions at the national level. The trend data preclude a static view of the social, demographic and economic phenomena that are discussed in this paper, and enable a dynamic analysis of development. The country-level data usually tally with the sub-regional trends, but also provide a more differentiated picture. They shed light on intra-regional diversity and the idiosyncrasies of development. The presentation of country-level data in thematic world maps enables a rapid assessment of geographic distributions.

The global data presented in this paper were derived from online databases of the following international organizations: the World Bank (WB), the Food and Agriculture Organization (FAO), the International Labour Organization (ILO) and the United Nations Population Division (UNPD). A large number of variables were distilled and analysed. Together they illustrate the changing context in which rural youth in developing countries struggle to eke out a living and to find decent work. A disadvantage of the global data is that they are hardly ever disaggregated according to locality (rural / urban) *and* age group (youth / adult). Therefore, it is usually impossible to isolate rural youth as a distinct demographic group, and to describe their employment situation vis-à-vis that of urban youth and rural adults. In the last part of this paper, the possibilities of an alternative set of data were explored: the Living Standard Measurement Studies. These country databases have a much more limited historical and geographic coverage, but they do allow for a very detailed analysis of both quantitative and qualitative aspects of rural youth employment. The employment data for one country (Nicaragua) were analysed and presented for distinct demographic groups, disaggregated according to locality (rural/urban), age group and gender. One of the findings was that young rural women face higher and different barriers to decent work than young rural men. If this is also true for other countries, gender should be a focus point in future research and policy on rural youth employment. To advance the knowledge on rural youth employment, it would be necessary to conduct a cross-country analysis of employment data from Living Standard Measurement Studies of different developing countries.

A general conclusion from the global data presented in section 2 is that rural youth's prospects of finding decent work are most worrying in Sub-Saharan Africa (but less so in Southern Africa) and Southern Asia. Low agricultural productivity and limited opportunities to find work outside agriculture in these sub-regions make the situation for young rural people particularly precarious. According to most indicators, the employment situation of rural youth, especially in terms of quality, is more promising in Latin America and East Asia. North Africa and the Middle East take an intermediary position on most indicators. Historical data from different parts of the world suggest that a more general economic take-off is preceded by a boost in agricultural productivity. When less people can produce the food and other primary products needed by the country's population, more people can dedicate their labour to non-agricultural activities that usually generate higher levels of income. A recommendation of this study is to develop interventions that focus agricultural extension activities on rural youth. They are on average higher educated and more open to change than older generations. If the conditions for rural youth to dedicate their productive endeavours to agriculture become more encouraging, this would greatly contribute to the quality of rural youth employment and development in general. Prospects of earning a decent living and seeing progress in life are a necessary condition for rural youth to contribute to their own development, and to that of their families and their countries at large.

Acknowledgements

The author wishes to thank Albertine de Lange, Soline de Villard, Peter Wobst, Francesca Dalla Valle and Bernd Seiffert for their constructive comments on earlier drafts of this paper.

References

Davis, B., P. Winters, G. Carletto, K. Covarrubias, E. Quinones, A. Zezza, K. Stamoulis, G. Bonomi & S. DiGiuseppe (2007). *Rural Income Generating Activities: A Cross Country Comparison*. ESA Working Paper No. 07-16. Rome: FAO.

Fares, J., C.E. Montenegro & P.F. Orazem (2006) *How are Youth Faring in the Labor Market? Evidence from Around the World*. Background paper to the 2007 World Development Report. Washington DC: The World Bank.

Hussmans, R., F. Mehran & V. Verma (1990). *Surveys of economically active population, employment, unemployment, and underemployment: An ILO manual on concepts and methods*. Geneva: International Labour Office.

ILO (2008). *Global employment trends for youth*. Geneva: International Labour Office.

ILO (2009). *Global employment trends, update 2009*. Geneva: International Labour Office.

UNDP (2009). *Human Development Report 2009: Overcoming barriers: human mobility and development*. New York: UNDP.

World Bank (2006). *World Development Report 2007: The next generation*. Washington DC: The World Bank.

World Bank (2007). *World Development Report 2008. Agriculture for development*. Washington DC: The World Bank.

World Bank (2009). *Africa Development Indicators: Youth and employment in Africa, the potential, the problem, the promise*. Washington DC: The World Bank.

Online data sources

FAO-STAT: <http://faostat.fao.org>
World Development Indicators: <http://www.worldbank.org/data>
World Development Reports: <http://ww.worldbank.org/wdr>
LABORSTA: <http://laborsta.ilo.org>
World Population Prospects: <http://esa.un.org/unpp>
Living Standard Measurement Surveys: <http://www.worldbank.org/lsms>