

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/345144922>

Economic Growth in Developing Countries: A comparative Analysis of Endogenous Factors between Ghana and Uganda

Conference Paper · November 2016

CITATION

1

READS

537

4 authors, including:



Dastan Bamwesigye

Mendel University in Brno

84 PUBLICATIONS 686 CITATIONS

[SEE PROFILE](#)



Abel Joaquim Zico

Eduardo Mondlane University

5 PUBLICATIONS 2 CITATIONS

[SEE PROFILE](#)



Radka Redlichová

Mendel University in Brno

23 PUBLICATIONS 62 CITATIONS

[SEE PROFILE](#)

Economic Growth in Developing Countries: A comparative Analysis of Endogenous Factors between Ghana and Uganda

Dastan Bamwesigye, Abel Zico, Kenneth Koranteng, Radka Redlichova

Cite: Bamwesigye, D., Zico A, J., Koranteng K., Redlichova R., 2016. Economic Growth in Developing Countries-A comparative Analysis of Endogenous Factors between Ghana and Uganda. Conference Proceedings: Region v rozvoji společnosti 2016: sborník příspěvků Brno: Mendelova univerzita in Brno, 37—43, ISBN 978-80-7509-459-9. http://www.icabr.com/respo/RESPO_2016.pdf

Abstract:

This study includes specifics and statistics on Uganda's and Ghana's economies respectively. It includes analysis of up to date time-series data on indicators such as Growth Domestic Product (GDP), GDP per capita, inflation, un employment rates, population growth, and employment by sector. An investigation on sector performance was run to find the index of specialization of the two countries which fall in two different regions but with homogeneous endogenous characteristics as per tropical Africa characteristic. The results confirmed the homogeneity of the two countries especially in sector performance among others. The study equally found out that non of the regions is specialized in any economic sector or activity. The study draws recommendations as per the findings from investigation in the above indicator for policy decision and future research.

Key words:

Regional Economics, specialization of Regions, development and Growth

1. Introduction

Uganda like many other tropical and Sub-Saharan countries, is a lower-middle-income country with a small-sized economy. Uganda ranking 103rd largest economy by nominal Growth Domestic Product (GDP) in the world (World Bank 2016). According to the International Monetary Fund, in 2013, Uganda's GDP was USD 23 Billion. Uganda's GDP grew at a rate of 6.03% in 2013 and up-to-date GDP per capita, in purchasing power-adjusted dollar relations, is USD 1,092.52. The record current figure for inflation in Uganda, as measured by the variation in consumer price index, was 5% in 2013, against 14% in 2012 (Uganda Bureau of Statistics 2012, Uganda Bureau of Statistics 2012). Uganda's economy is primarily services-based.

Agriculture accounts for 24% of GDP and employs over 65% of the population. Manufacturing and industry accounts for 29% of GDP and employs 6% of the population. The service sector accounts for 47% of the GDP and employs 28.40% of the entire population. Uganda's government proceeds in 2013, was 15% of GDP while its government spending was 18% of GDP. Uganda's currency is the Uganda New-fangled Shilling (UGX) has been losing value on the international market. According to

the Dairy Monitor newspaper of March 5, 2016, Uganda's bank exchange rate against the dollar had shot over and above, the national debt was equally higher than ever, inflation going over 10%.

Like Uganda, Ghana is also a lower-middle-income country with a small-sized economy, located in the North West of Africa. Ghana is the world's 85th largest economy by nominal GDP rank. According to the International Monetary Fund, in 2013, Ghana's GDP in USD, 44.22 billion. Ghana's GDP grew at 6% in 2013. Current GDP per capita, in purchasing power-adjusted dollar relations, is at USD 2,553.92 (World Bank 2016). The most recent figure for inflation for Ghana, as measured by the change in consumer price index, was 11.6% in 2013, contrary to 9% in 2012. The unemployment rate in Ghana in 2013 stood at 4.6%, versus 4.20% in 2012.

Ghana's economy is largely services-based. Agriculture accounts for 22% of GDP and employs 41.5% of the population. Manufacturing and industry accounts for 29% of GDP and employs 15% of the population. The service sector accounts for 50% of the GDP and employments stands at 43% of the population as at 2013. Ghana's government revenues, in 2013, were 18% of GDP while its government spending was 29% of GDP. Ghana's government debt, as of 2013, is 57% of GDP. Ghana's money is the Ghana Cedi (GHS). The latest exchange rate, as at 13-Mar-2015, was 3.57 GHS each 1 USD.

The aim of this work was to analyze the developmental indicators of Ghana and Uganda, by comparing indicators such as GDP per capital, inflation rate, unemployment rate, population growth and productive sector share of their GDP and make recommendations and based on the analysis on what each country should do to strengthen each of the developmental indicators leads to spillover effects and externalities, education and formation of human knowledge capital forces of economic growth. Public policies enhance economic policy in certain regions and considering alternative policies to foster regional economic development and increase the employment and income rates of the residents of particular regions. (Kozicki 2000, Greiner, Semmler, Gong 2016). Although Adam Smith in his book the nature and causes of a nation's wealth suggest that countries must apply economic policies that able to stimulate production, and employment (Smith 1776). This thought has been appropriate for most Developing countries/economies which are still agro-economies with an example of trade liberalization in the coffee subsector in Uganda changing the economy over the last two decades (Uganda Bureau of Statistics 2008, Mukiibi 2001, Musumba, Rajorshi 2013, Nahanga, Bamwesigye, Darkwah 2015, Verter, Becarova 2016)

Materials and Methods

Time series data was obtained from books, journals articles, among other sources. Precisely, data used in the was obtained from consistent and dependable National sources such as Uganda Bureau of Statistics (UBS), African Development Bank (ADB), Food and Agriculture Organization of the United Nations (FAO) yearly Statistics, and World Bank (WB).

Descriptive and statistical Analysis of secondary time series from the World was used to draw Comparison of development indicators between Uganda and Ghana which are located in different regions of West and Eastern African Respectively. . An investigation on sector performance was done to find the specialization index of the two countries which fall in two different regions but with homogeneous endogenous characteristics.

Specialization Index (SI),

$$SI = \frac{\sum_{i=1}^n (E_i)^2}{\left(\sum_{i=1}^n E_i\right)^2}$$

E... the number of employed people in the individual fields in the region

i... the number of fields that operate in the region

Formula 4: index of specialization

Source: Čadil, 2010 descriptions modified by the author

Source: Radka Redlichova, 2013

Finding and Discussion

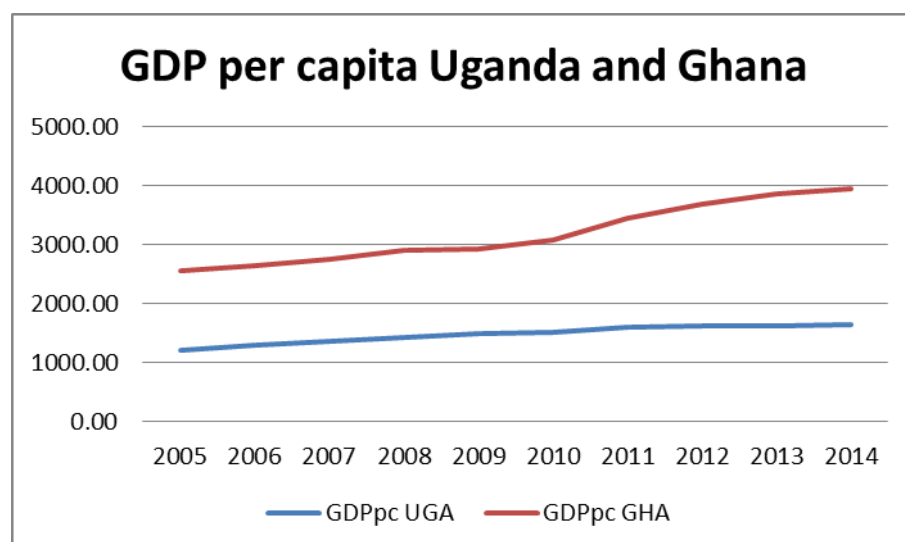


Fig 1: GDP per capita for Uganda and Ghana

Source: World Bank Data

Fig 1 above indicates the total output of each country's gross domestic product in each country for the past 10 years. Comparing the two countries' GDP per capita, you will notice that Ghana has had a significant increase in that area, which indicates growth in the economy and tends to translate as an increase in productivity over Uganda for the past 10 years. This increase can be credited to the rapid growth of various economic activities that the country has improved well in. Economic activities such as Mining and agriculture play an essential role in the economic growth and development of the sub-Saharan country.

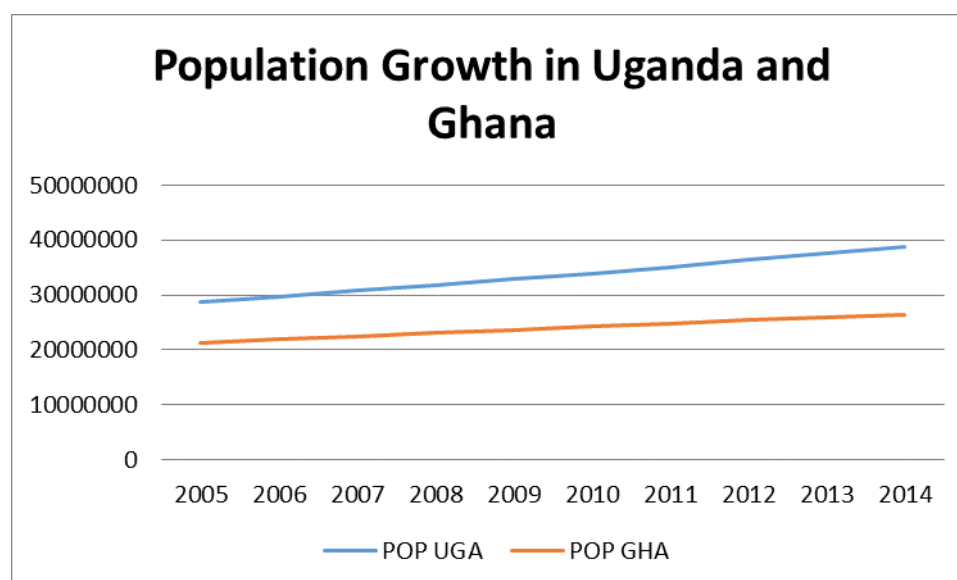


Fig 2: Population Growth in Uganda and Ghana

Source: World Bank Data

Fig 2 above also indicates how Uganda's population has increased for the past decade over Ghana. The trend of the graph indicates a higher pace of which is as a result of a high birth rate in Uganda while

that of Ghana is moving at a slower pace. This is as a result of deaths during the period and migrating to and from other countries.

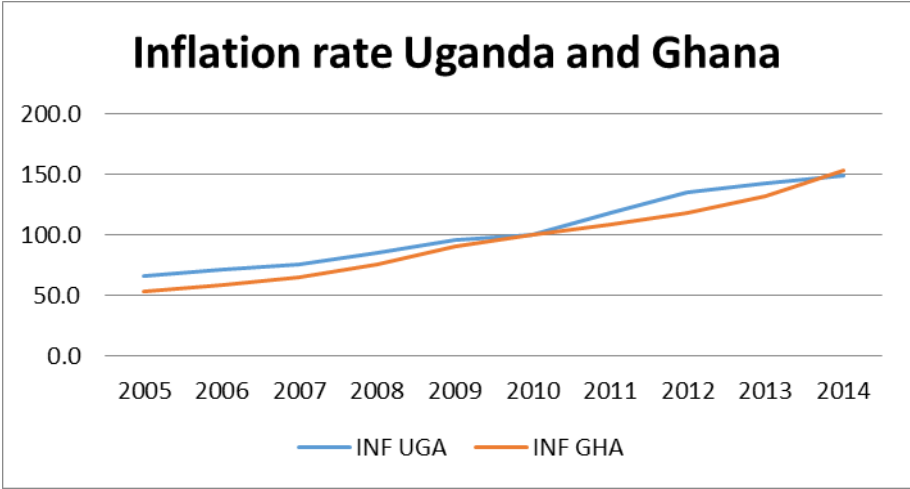


Fig 3: Inflation rate for Uganda and Ghana

Source: World Bank Data

Fig 3, above shows the rate of inflation rate for Uganda and Ghana. Both countries had had a parallel increasing inflation rate from mid of 2005 to 2010 where both had a stable rate for that year. There was a further increase in the same year 2010, then continued to increase much higher for Uganda in 2012 at rate of 140.0 and then a surpassing rate at the end of 2013 by Ghana at a higher rate of 160.0. Inflation affects the country’s economic growth, exchange rate, interest rate etc.

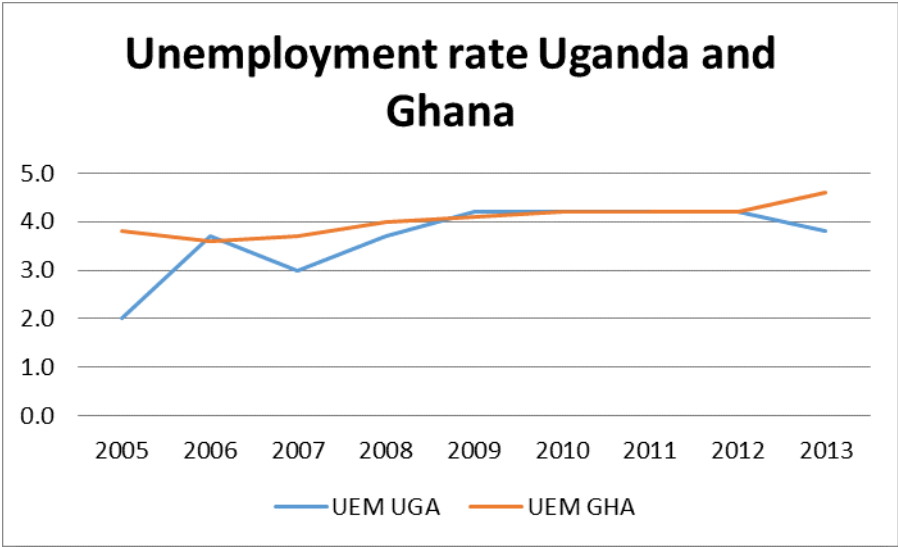


Fig 4: Unemployment rate Uganda and Ghana

Source: World Bank Data

Fig 4 above indicates the trend of unemployment rate in both countries which measures the number of people in the labour force, the beginning of 2005-2013. The figure above shows that in 2005 to 2009 unemployment rate in Uganda had a fluctuation rate which is 2.0 fall and then rise in 2006 and a fall in 2007 cause a rise in 2009 as compared to Ghana which had a high level of unemployment from 2005 and a partial decrease from 2006 to 2007, both two countries had a stable unemployment rate until the beginning of 2013 which saw Uganda surpassing Ghana. Uganda had a

decrease of unemployment in 2013 due to the follow reasons; Agricultural Mechanization and Enhancement support for small and medium scale sector.

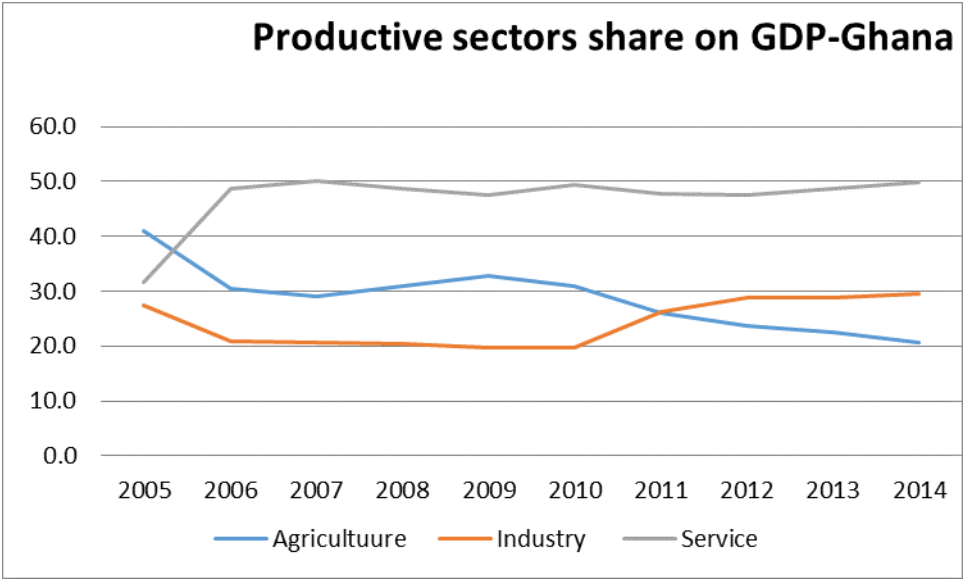


Fig 5: Productive Sector share on GDP for Ghana

Source: World Bank Data

Fig 5, above shows the productive sectors share on GDP of Ghana. Service sector surpasses the agriculture sector at the end of 2005 and in 2006 to 2014 the highest GDP contributor, Agriculture sector had a decline in the contribution rate over the years due to inadequate resources, technological advancement, etc Industrial sector has also played a role in the GDP of Ghana but a low rate from 2005 to 2010 and a rise from 2010 surpassing the agricultural sector in 2011 and a more higher and stabilize in the following years.

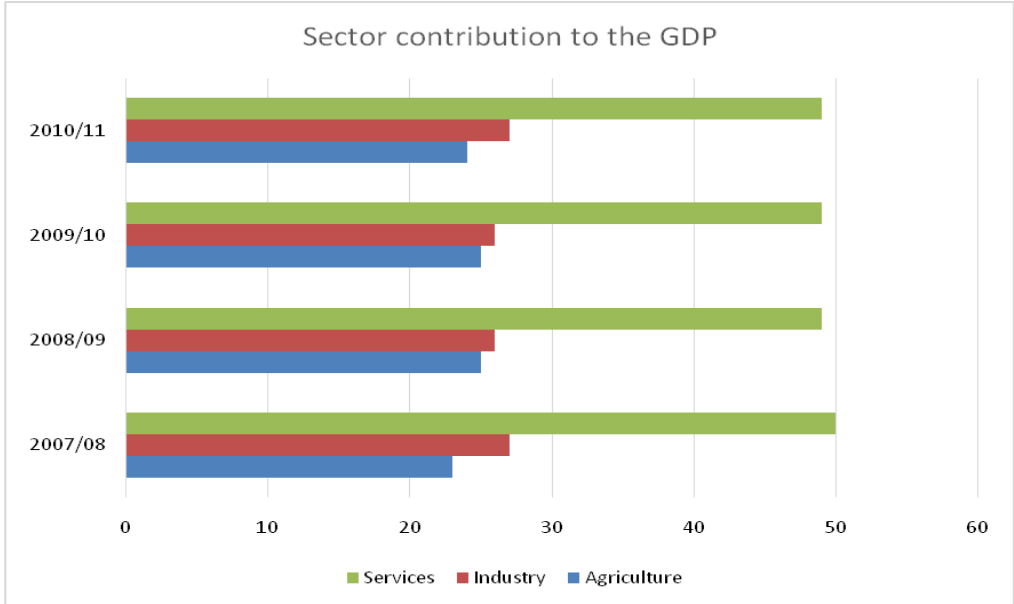


Fig 6: Sector contribution for Uganda

Source: World Bank Data

Fig 6, shows the trend of contribution of major sectors of Uganda with Agriculture growing at a slower rate as indicated from 2007/8 and like industry increasing at constant interval at 24% to 26% and 28% to 29% respectively.

A comparison of the two countries indicates that averagely Agriculture stands at 24% to 22%, 29% to 29% and 47% to 50% for Uganda to Ghana Respectively.

Table 1: Contribution of major sectors of Uganda and Ghana (%)

Sector	Uganda	Ghana
Agriculture	24	22
Industry	29	29
Service	47	50

Source: Uganda Bureau of Statistics 2012, World Bank Data

$$SI \text{ for Uganda} = \frac{\text{Sum } (24)^2 + (29)^2 + (47)^2}{(\text{sum } 24+29+47)^2} = 0.3626$$

$$SI \text{ for Ghana} = \frac{\text{Sum } (22)^2 + (29)^2 + (50)^2}{(\text{sum } 24+29+47)^2} = 0.3829.$$

Given that specialization is indicated by Specialization Index = or greater than 0.7 which indicates that almost all people are employed in the same sector. Our results show that there is no specialization in the two homogenous countries.

However, Kozicki 2000, De Vroey, Malgrange 2011, Tcherneva 2011, Redlichova 2013, Verter, Becarova 2014 among other scholars assert that that economic policies are solely responsible for economic stability and growth. This because they are vital in mitigating dangers of market failure and negative externalities.

Conclusion

The study *centris paribus*, concludes that the two countries in their homogeneity lack specialization in sector performance. However, the investigation noted that other indicators of unemployment, inflation and GDP per Capita, population explosion among others being far beyond the normal figures are among other causes of the states' poor performance macroeconomically.

The investigation recommends that;

Both country governments' need to employ monetary and fiscal policies optimally so as to obtain macroeconomic variables of full employment, economic growth, and price stability hence leading to economic miracles.

Both Governments need to prioritize the Agriculture sector by providing a steadfast funding since it employs more than 60% of the population in both countries.

The two states need to put in place and or strengthen the existing Collective governmental effort to control the incomes of labour and capital, usually by limiting increase in wages and prices which are caused by Political pressures.

Policies focused at controlling of inflation, nonetheless may also indicate efforts to modify the distribution of income among workers, industries, locations, or occupational groups/sectors.

The governments equally need to first track development policy of Privatization and deregulation so as to create more employment, and incomes of individuals through investments.

Monitory Policies; The government of Ghana and Uganda should further through their Central Banks strengthen the existing or draft more strict monitory policies to regulate its supply and cost of money to the public so as to achieve the social economic objective of the entire economy/nation endogenously.

Literature

1. De Vroey, M., Malgrange, P. 2011. The History of Macroeconomics from Keynes's General Theory to the Present.
2. Greiner, A., Semmler, W., Gong, G. 2016. The Forces of Economic Growth: A Time Series Perspective. Princeton University Press, 2016. ISBN 1400880157, 9781400880157
3. Kozicki, S. 2000. Why Do Central Banks Monitor So Many Inflation Indicators? Federal Reserve Bank of Kansas City
4. The Dairy Monitor. March 5, 2016. Government defies MPs on borrowing Shs700b to stabilize Shilling. Monitor Publication.
5. Tcherneva, R. (2011). Fiscal Policy Effectiveness: Lessons from the Great Recession. Levy Economics Institute of Bard College January 2011
6. Redlichova, R. (2013). Regional Economy. Mendel University in Brno, Faculty of Regional Development and International Studies, Department of Regional and Business Economics. ISBN 978-80-7375-850-9.
7. UGANDA BUREAU OF STATISTICS 2012. Statistical Abstract 2012. Uganda Bureau of Statistics, Kampala, Uganda.
8. Smith, A. (1776). An inquiry into the nature and causes of the wealth of nations. R. H. Campbell & A. S. Skinner (Ed.). Oxford: Oxford University Press.
9. Uganda Bureau of Statistics 2008. Statistical Abstracts 2009. Uganda Bureau of Statistics, Kampala, Uganda.
10. Mukiibi. J.K., (2001). Agriculture in Uganda. Fountain Publishers Ltd: Kampala.
11. Musumba M., Rajorshi S. G. 2013. Transmission of World Prices to Ugandan Coffee Growers in a Liberalized Economy. Development Policy Review, 31(2) 219–234.
12. Nahanga V., Bamwesigye D., Darkwah D. S., 2015. Analysis of Coffee Production and Exports in Uganda. In ICABR 2015: X. International Conference on Applied Business Research. 1. vyd. Madrid: Mendel University in Brno, 2015, s. 640--647. ISBN 978-80-7509-379-0. <http://www.icabr.com>
13. Verter, N., Becvarova V. 2014. Analysis of some drivers of cocoa export in Nigeria in the era of trade liberalization. *Agris On-Line Papers in Economics and Informatics*, 6(4), 208-218.
14. Verter, N., Becvarova, V. 2016. The Impact of Agricultural Exports on Economic Growth in Nigeria. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*. 2016. v. 64, no. 2, p. 691--700. ISSN 1211-8516.
15. World Bank 2016. <https://www.quandl.com>

Contact address of the authors

Dastan Bamwesigye¹, Abel Zico², Kenneth Koranteng³, Radka Redlichova⁴

¹ Department of Forest and Wood Products Economics and Policy, Mendel University in Brno. xbamwesi@mendelu.cz / bamwesigyedastan@gmail.com

² Department of Tourism, School of Tourism and Hospitality, Eduardo Mondlane University, Mozambique.

³ Faculty of Regional Development and International Studies, Mendel University in Brno

⁴ Faculty of Regional Development and International Studies, Mendel University in Brno. Zemedelska 1, 613 00 Brno, CZECH REPUBLIC