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How multinational enterprises can impact global development? – MNEmerge project findings and policy recommendations

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## Executive summary

- 1) The MNEmerge project aims to provide a comprehensive framework for understanding the impact of multinational enterprises on United Nations Millennium Development Goals (MDGs) in developing countries using case studies, quantitative data, and policy analysis. The MDGs, and later on the Sustainable Development Goals (SDGs), were created to eradicate global issues, such as poverty, hunger, and inequality, and to promote sustainable development.
- 2) MNEs are wanted in emerging markets but their impacts are limited. MNEs have a positive effect on the individual level but the effects on the society at large are less clear. MNEs seem to be less keen on sharing their knowledge which would be the outmost important factor in economic development
- 3) Sanitation is more than just access to toilets. It is a part of promoting health and gender equality among other things.
- 4) MNEs are the main suppliers of the non-generic medicines in India. Consequently, their FDI flow should be encouraged and directed towards greenfield investments. MNEs also play a crucial role in the development of CSR practices in India which are still evolving.
- 5) Electrification is crucial for the development of the rural areas. Problems with electrification make areas less attractive for businesses. A solution for this could be government based incentives for the MNEs to encourage starting operations and to help in the initial stages.
- 6) Knowledge transfer is crucial factor in the economic development. In order for it to be effective, MNEs should be encouraged and motivated to enhance their knowledge transfer practices both in intra and inter-firm contexts. Building capabilities also has fringe benefits that can create a positive cycle affecting a whole society in a sustainable way.

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## 1 Introduction

The socioeconomic issues especially in the developing countries require resources and attention. Why is it that the world has such big social issues when there is the technology and the knowhow existing to do things better? Governments and non-governmental organisations (NGOs) have worked towards eradicating these issues but the progress of battling social issues has been slow and only incremental which is due to a problem of scale; governments and NGOs cannot make large scale impacts because they lack resources. (Porter 2013)

Poverty reduction has been at the centre of concern regarding development. While traditional poverty reduction methods such as aid still play an important role, recent frontiers of development research have argued that economic growth is a fundamental mechanism for poverty reduction in low income countries. The direct and indirect effects of economic growth, of which foreign direct investment (FDI) serves as one of the major engines, will lift people from poverty. A great example is China which has been able to achieve this in the past three decades. (Sutton & Kpentey 2012.)

One of the reasons to draw attention to multinational enterprises (MNEs) is that traditionally enterprises are taught not to be considerate of social issues and they only drive towards bigger profits and cheap resources. This goes in line with the thoughts of Michael Porter (2013) who argued that one of the main reasons there has been so little development is the lack of resources which can be gained only from companies. However, for this to work businesses need to be seen differently than they are today and businesses need to see themselves differently as well. (Porter 2013; Väättänen & Teplov 2016.)

Other explanations offered for global problems have been the lack of money and education but studies have shown that increased schooling is not generating the expected income pay-off (see e.g. Porter 2013; Hausmann 2013). Therefore there must be other underlying reasons why the social issues still persist. Hausmann (2013) has suggested that the issue could be the lack of productive knowledge. Modern production involves putting people or teams together that have different pieces of knowledge such as logistics, HR or procurement. People in the developing countries do not know how to run things differently and therefore the society does not experience sustainable development. They lack knowledge as a society.

The MNEmerge project aims to provide a comprehensive framework for understanding the impact of multinational enterprises on United Nations Millennium Development Goals (MDGs) in developing countries using case studies, quantitative data as well as policy analysis. The MDGs, and later on the Sustainable Development Goals (SDGs), were created to eradicate global issues, such as poverty, hunger, and inequality, and to promote sustainable development.

There are many reasons and explanations offered to why global issues still prevail while there is the technology and knowhow available. The purpose of the MNEmerge project is to understand and see the reasons behind the phenomenon and give recommendations how to go further. The new perspective that MNEmerge offers is the role of the MNEs in this whole scenario.

## **2 The MNEmerge project**

MNEmerge is an international research project that aims to provide a comprehensive framework for understanding the impact of MNEs on United Nations' Millennium Development Goals in developing countries using case studies, quantitative data, and policy analysis. Later on in the project the Sustainable Development Goals were taken into consideration as well, as those provide more sustainable look into the project. MNEmerge is financed by the EU's Seventh Framework Programme.

The MNEmerge project sought out to find out how the MNEs could solve global problems, especially how MNEs could help in eradicating poverty from the world. It created a framework model to analyse the impacts of MNEs towards socio-economic development. The framework was then tested and verified through three case studies, namely in India, Ghana and Brazil. Through the cases and the framework model the consortium created policy recommendations to different stakeholders. (Väättänen & Teplov 2016) It was considered important to develop such methods that can be used to analyse the impact of multinationals in sustainable development, and across countries in different country, culture and institutional context. (Fu 2016.)

The MDGs (figure 1) that were in the centre of the project, range from halving extreme poverty to halting the spread of HIV/AIDS, all by the target date of 2015. These goals form a blueprint agreed to by all the world's countries and all the world's leading development institutions. The goals were created in order to meet the needs of the world's poorest as the previous efforts have not been able to reach the desired outcomes.



Source: UN 2016

The 17 SDGs (figure 2) seek to build on the MDGs and complete what the MDGs did not achieve. The SDGs were announced in September 2015 when the target date of MDGs was closing in. The target date for the SDGs lie in 2030 and they integrate and balance the three dimensions of sustainable development: economic, social and environmental. The sustainability aspect is very important as it is not enough to get rid of a problem, it is important to make sure that it is sustainably handled so the issues do not reoccur. Therefore, as the SDGs were announced, the MNEmerge project took them into consideration alongside the MDGs.

**Figure 2 Sustainable Development Goals**

Source: UN 2016

The MNEmerge consortium included the following partners:

- Lappeenranta University of Technology, Finland
- University of Birmingham, UK
- University of Kent, UK
- University of Oxford, UK
- University of Turku, Finland
- United Nations University (UNU-MERIT), the Netherlands
- Public Health Foundation of India (PHFI), India
- Science and Technology Policy Research Institute (CSIR-STEPRI), Ghana
- INESC P&D Brasil, Brazil.

The project had two perspectives; first there was the European perspective where the interest was to see how well the companies are behaving in emerging markets; are they “model citizens” or not. Second, there was the emerging markets’ perspective. The emerging markets want MNEs to come in and at the same time to provide something good to the country, such as improved infrastructure or employment. Thus, there is the



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dilemma of trying to attract them and regulate them at the same time which makes the framework very delicate. (Väätänen & Teplov 2016.)

The duration of the project was three years, starting in January 2014 and ending in December 2016. At the end of the project the policy recommendations, which are based on all the work done in the project, are given to the various stakeholders. The research in three developing countries, India, Brazil and Ghana, addressed different development challenges, namely sanitation, access to medicines, electrification of rural areas, and knowledge transfer. The fact that the project had local partners in all of the case study countries was one of the success factors of the project. However, it is important to keep in mind that countries like Brazil and India are huge countries in terms of size and population. Thus, there are many regional differences within the country, some regions are more developed and successful than others. Some might look at the best regions as an example and see these countries as a unit without diversification, even though they are not. (Väätänen & Teplov 2016.)

Many of the perspectives and issues studied in this project are missing completely from the academic journals which is why the information is very important and the academic community is keen on hearing the outcomes. There really is a gap in policy and in academic research concerning for example, understanding about managerial knowledge transfer within MNEs, especially in Africa, and low-income country context. Although in some cases there might be some existing knowledge or theories, the MNEmerge project was the first one where the issues are empirically tested. Thus, the project is making an important contribution for the future studies and policies. The findings are also very interesting and have important policy implications to investment, industrial, and education policies. (Fu 2016; Gupta 2016; Parihar 2016)

Thus far the feedback from the stakeholders from outside the project (e.g. embassies, MNEs, governments, academics) has been positive and the different organisations have been interested in the project and its deliverables. More feedback and impressions are available later on as the dissemination process continues. (Parihar 2016)

Even though the project ends in December 2016, its outcomes are just starting to reform. As the policy recommendations are reviewed and taken into account the project may have a broader impact on the addressed challenges worldwide. Learning takes time as

does applying new policy recommendations. The results can then gradually spread from the case study areas to other regions and economies.

This report is based on interviews of the project's partners. The interviewees were:

- Pervez Ghauri, University of Birmingham
- Xiaolan Fu, University of Oxford
- Rushva Parihar, UNU-MERIT
- Suraksha Gupta, University of Kent
- Godfred Frempong, Science and Technology Policy Research Institute in Ghana
- Leonardo Bremermann, INESC P&D Brasil
- Aashna Mehta & Habib Hasan, Public Health Foundation of India
- Juha Väättänen & Roman Teplov, Lappeenranta University of Technology

The next chapters will go through the framework and the different case studies of the MNEmerge project. The existing challenges are discussed and the findings as well as policy implications are introduced. In the beginning of each case study the main MDGs and SDGs are listed to demonstrate which problems were mainly addressed or to which ones the case study seemed to have the biggest impact.

### **3 Multinational enterprises in developing countries**

Traditionally MNEs have been seen as one of the problems in terms of socioeconomic issues, not one of the solutions. Companies thrive to make profit and in that sense they are very selfish; if they can lower costs and gain more money, they will do it. However, corporate social responsibility (CSR) has increased awareness over the past 50 years. For businesses it was first a source of some competitive advantage but nowadays it is profitable business to ensure that at least some CSR practices are on play. Furthermore, it is the companies that have the resources that NGOs are lacking. All wealth is created in business and business generates resources when it makes profit. Therefore, MNEs are gradually receiving more attention in how they could help the developing economies and what they could get out of it.

There are multiple reasons for MNEs to expand their operations to emerging markets such as cheaper labour force, tax breaks and new market potential attracting businesses.

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On the other hand emerging markets also have inadequate infrastructure for the business and therefore companies need to build the needed infrastructure. Thus in general MNEs are assumed to contribute to local economic development through their FDIs. As they set operations in emerging markets they are assumed to help the economic development of the entered market through creating employment and creating infrastructure that will help the entire society. The creation of these linkages is considered the main mechanism by which MNEs can produce positive externalities benefiting the socioeconomic development. (Väättänen 2015.)

In addition to FDI and generating employment MNEs may impact local development by generating new business opportunities for local companies, by creating and introducing innovations that have not been accessible previously, and by engaging in corporate philanthropy and socially responsible investments. However, the MNEs do not automatically create positive development and impacts as the multinationals have been criticised for generating uneven development, dualism, and inequality, environmental degradation, and influencing government policies, often unfavourably to social equity and development. There are multiple challenges when operating in developing countries, one of the main ones being the challenges with legitimacy which lead to challenges in social responsibility. Companies should be socially responsible from the beginning, no matter what the market or consumer base. They should create a marketing strategy that positions them right and so that they can benefit from it. (Gupta 2016.)

What the MNEmerge found out was that even though MNEs are wanted in emerging markets, their impacts are limited. The MNEs have a positive effect on the individual level, namely for those employed by the MNE, by getting better life quality, but the effects on the society at large are less clear. MNEs seem to be less keen on sharing their knowledge which would be the outmost important factor in economic development.

The general policy implications for all MNEs include three factors which concern brand development, acquisition and distribution. In the brand development, the MNEs should focus on building a corporate brand rather than working on the product brands. In addition, poverty reduction should be integrated into corporate agendas in order to make it visible for all stakeholders in the vision and mission of the company. This would in turn affect the marketing and thus the brand development as well. (Gupta 2016.)

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The second factor that rose from the studies was acquisition and technology. In general, MNEs are highly technology oriented and they use technology to improve their efficiency but they do not develop technology that would be based on the structure of the emerging market. Often when they work with local companies they are only involved with non-technology based operations which is not helping the economic development. Technology is important for the emerging markets as well and it helps in improving efficiencies and could lead to development of capabilities of the local companies which will in turn have an effect on poverty reduction. All of these actions are connected which is why the different stakeholders have to be altogether innovatively engaged in creation of value. (Gupta 2016.)

The third factor concerns distribution. The solution network should be engaged in the CSR activity due to the fact that at the moment managers are not interested in CSR unlike companies and management. If the corporate agenda would include both the CSR and the distribution network, the CSR initiatives would be more successful and have stronger impact. Then the capability enhancement would automatically be a part of the industrial practices as well. This could be one way to motivate managers to look at the social development, participate and contribute to the development of the market in which they operate in. (Gupta 2016.)

Operating in emerging countries represents challenges for MNEs, starting from the insufficient infrastructure, but the new markets also have a lot of potential, cheaper resources and increasing purchasing power. The companies can themselves further the development of the region by engaging in CSR activities and also improve the knowledge transfer in the company. When the companies can see themselves as a part of the solution to the global development challenges, others will follow suite.

#### **4 Sanitation and access to medicines in India**

There were two separate case studies conducted in India; sanitation and access to medicines. Through the sanitation case study the researchers were involved with the FINISH project where sanitation facilities were built in rural areas. The aim was to see how access to sanitation would help in terms of health and clean water and the overall development of the regions studied.

Access to medicines, on the other hand, looked at the pharmaceutical sector in India and how it is structured in terms of domestic and multinational players. The aim was to see how much impact MNEs have in the sector and what kind of FDI the sector requires.

#### 4.1 Sanitation in India



Source: UN 2016

In 2013, 2,5 billion people lived even without basic sanitation, of which almost one billion were children (Ramani et al. 2012). The lack of access to toilets compromises human and especially women's dignity which is why improvement in sanitation is crucial for the MDGs and SDGs. For example, diarrhoea is the leading cause of illness and death globally and 88% of diarrhoeal deaths are due to a lack of access to sanitation facilities, inadequate availability of water for hygiene and unsafe drinking water (UN Water Statistics 2012).

Thus the MNEmerge case study in India looked at the impact of the Financial INclusion Improves Sanitation and Health (FINISH) programme in India through a study of the incidence of diarrhoea, general health status, health expenditures in households with toilets vis-à-vis those without toilets. The goal was to look at the linkages between sanitation and health. FINISH is a programme which builds sanitation facilities in rural areas in India. It is supported and implemented since 2009 by an Indian-Dutch

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consortium comprising banks, insurance companies, NGOs and academic and governmental institutions from the two countries.

The main deliverable in this case study was to create a policy design and incentive provision for MNEs to contribute to the MDGs for growth, poverty reduction and gender equality. From the MDGs and SDGs that were the targets in the case study, one can see that access to sanitation has much larger systemic impact than just building toilets and giving people access to them. Proper sanitation can impact numerous other things as well, such as clean water and sanitation, reduced inequalities, good health, well-being and climate action. (Ramani & Parihar 2015) It is one of the methods of eradicating poverty because it also effects health, food and nutrition. (Parihar 2016.)

The MNEmerge project studied the sanitation in India by interviewing people from the rural areas of five different states, namely Bihar, Rajasthan, Maharashtra, Tamil Nadu and Gujarat where in each they interviewed 2000 households to get empirical evidence. The leading partner in the study was UNU-MERIT. At the same time, the FINISH project was ongoing in the same areas, where sanitation facilities and infrastructure were built for the local communities.

The case study revealed that there is a positive linkage between health and sanitation as the initial hypothesis assumed. However, it is important to notice that it is not the only positive linkage as sanitation needs to be looked at as a holistic concept and taking the entire wash sector into consideration. A combination of actions will make a better impact than just looking one thing at a time. For example, just improving access to sanitation is not going to improve health and just improving water quality will not improve health. It is the combination of all that works. Therefore there is a need to improve water quality, access to water, and access to sanitation. (Ramani & Parihar 2015.)

To truly have an impact on improving health, access to water and sanitation is not enough. How people manage waste becomes the most important thing as diseases are easily spread through waste. At the moment, the waste management is in its infancy in many developing economies, where both bio-degradable and non-bio-degradable waste are not managed in a hygienic and sustainable way. This exposes people to diseases and thus even if there was access to sanitation facilities, the impact on health cannot be seen. This finding was very important as it has not been empirically found before. (Parihar 2016.)

Sanitation is also more than just access to toilets. Thus, one of the main findings was that just building toilets is not enough as there are people that have never used them before and therefore did not know how or why to start using them. It was found out that even when the toilets were constructed, people were not using them which is why there is a need to redefine how we understand access. Just giving people the physical infrastructure is not necessarily enough because people are not aware of the facilities and are used to defecate in the open. All of this leads to a conclusion that there is a need for some cultural shifts. Education on this matter was not originally considered but throughout the study it became evident that it is needed to attain sustainable solutions that affect the ecosystem permanently. (Parihar 2016.)

Policy insights from the project were manifold. The sanitation facilities help in gender equality as women have opportunity to use them in private. In many places women have had to wait until it is dark outside to relieve themselves. Other policy implications included technology design and construction protocols, capacity building among masons, need of behavioural change, and safe disposal of waste. The crucial part to understand is that complementarities are essential. (Dutta, Hajra and Ramani 2016.)

#### 4.2 Access to medicines



Source: UN 2016

Affordable access to medicines in developing countries through the cooperation with and within the pharmaceutical industry is one of the focus areas of the MDGs. The access to medicines was studied in India due to the country's high poverty rate (nearly 35% in 2013) and lack of adequate healthcare coverage for the majority of the population. These

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factors make the access to medicines of crucial importance. The three main infections that the MDGs try to battle are HIV/AIDS, tuberculosis and malaria.

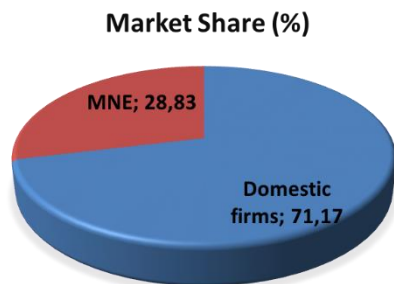
There are around 33,3 million people worldwide living with HIV/AIDS. The evolution of the infection is causing great concerns for both local authorities and global community especially in the populous countries like India and China. (UNAIDS 2010) Regarding tuberculosis there were 9,2 million new cases and 1,7 million deaths registered in 2006. Furthermore concerning malaria, there are still 109 countries endemic for malaria. In 2013, nearly a million people died of it with the majority being children under 5 years and in 2006, there were 247 cases registered with 3,3 billion people at risk. (WHO 2008)

All of the statistics emphasize the gravity of the issue and the need for good access to medicines in the developing countries that are the most at risk related to these infections. There are additional factors that the infections cause, such as lowered household income, lower livelihood enhancing investment, lower labour productivity, contract GDP and obstruction of the socioeconomic development process.

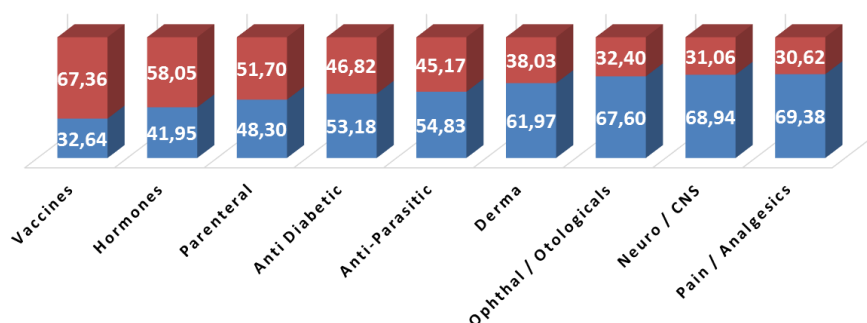
The MNEmerge project studied the contribution of MNEs in providing access to medicines in India and how they are, or can be, involved in helping to reduce the deadly infections. The Public Health Foundation of India was the main partner in this case study. The entire pharmaceutical market in India was looked at and determined what was the role and contribution of the MNEs in it. The main finding was that the market was by large dominated by the Indian players. (Hasan & Mehta 2016.)

The domestic pharmaceutical market in India is worth approximately USD 11,08 billion while the role of MNEs in the overall pharmaceutical market is only little less than 30% in terms of market share (figure 5). However, there were significant differences in the sub-segments as the role of MNEs vary across therapeutic segments (figure 6). For example, the MNEs are more active in hormones, vaccines and diabetic markets but the majority of the therapeutic segments were dominated by the Indian pharmaceutical companies. Thus, it is clear that MNEs are active in certain sectors in the Indian market which gives insights of their business strategy.





Source: A Framework Model on MNE's Impact on Global Development Challenges in Emerging Markets 2016.



■ market share of Indian firms (%)    ■ market share of MNEs (%)

Source: A Framework Model on MNE's Impact on Global Development Challenges in Emerging Markets 2016.

What was especially interesting in terms of the MDGs Indian players were dominating the therapeutics segment which is really crucial to the MDG's, such as HIV, malaria and tuberculosis. Apart from that, the MNEs are the ones primarily involved in introducing new medicines to India while the domestic players are mainly focused on the generics. Therefore, MNEs play an important role in the overall market.

MNEmerge then studied the reasons behind the business decisions made by MNEs and especially looked at the regulatory structure that exists in the market and its effects on the business decisions. The policy interventions that currently affect MNEs in India include consolidated FDI policy, Indian patent act (amended) and the national pharmaceutical pricing policy (NPPP) 2012.

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The policy initiators have massive impact on the MNEs and thus special attention was paid to one of them, namely to FDI. The pharmaceutical sector in India ranks amongst the top five or six sectors in terms of FDI. However, the main interest lies in brownfield investments instead of greenfield investment. This is somewhat problematic as regulators and academics seem to agree that brownfield investments are not the best form of FDI. Greenfield investments would be more beneficial for the economy in general.

The nature of FDI was the first policy recommendation given by the MNEmerge. Greenfield investments and acquisitions should be prioritised over the brownfield investments to ensure capability enhancement in the country. To achieve this the regulatory structure comes into play. One part of this should be the development of appropriate balance and the use of flexibilities of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Another thing that needs attention is the implementation of context specific pharmaceutical price regulation for exorbitantly priced medicines as it would be crucial in order to ensure the access to those medicines.

The other policy recommendations were directed at CSR in India. As it is in its early steps, CSR is still somewhat patchy in nature. Some CSR activities that are already in place include patient access programmes and some mobilisation of promotion of health. The small number of CSR activities is explained by the fact that in India CSR is relatively new as a mandatory requirement within the company law. Thus, there are still many obscurities and a lot needs to be done to determine what counts as CSR and what kind of CSR activities would be beneficial for the country. Hence, it needs to be streamlined and have a clear framework in order to work. For this to happen better regulations need to be in effect and the MNEs should have a better contribution to impacting the regulations so that it affects the long run goals of providing access to medicine in the country.

All in all, the access to medicines case study in India gave insights to many important issues. Even though the domestic pharmaceutical market is strong, there still is a need for MNEs as they are the main suppliers of the non-generic medicines. Consequently, their FDI flow should be encouraged and directed towards greenfield investments. Furthermore the MNEs can play a crucial role in the development of CSR practices in India which are still evolving.

## 5 Electrification of Brazil's rural areas



Source: UN 2016

Around 20% of world's population, approximately 1,5 billion people, do not have access to electricity. From these people the absolute majority live in rural areas. The typical usages of energy are electrification of households, lightning systems, health centres and clinics, and water pumping for irrigation. Therefore, it is easy to see the need for electrification and its relation to the MDGs and SDGs.

The Brazilian Federal Government launched a program called "Luz para todos" (Lights for all) in 2003 where the goal was to end electric exclusion in the country by 2010 by reaching over 15 million people. In the regions where the program has been implemented the number of households with access to electricity increased from 71% to 93% during 2000–2010.

The MNEmerge project evaluated the impacts of the Luz para todos program. INESC P&D Brazil assisted the MNEmerge project in terms of conducting the research activities in Brazil. The Lappeenranta University of Technology was also involved in this case study.

The existing rural electrification challenges known before beginning the case study included the dependence of market mechanisms (price liberalisation and privatisation of the sector) which leads to increased tariffs as remote rural regions are not attractive for

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MNEs due to poor infrastructure and low population density, necessity of clear legal and institutional framework, and the lack of studies on the role played by MNEs in electrification of rural areas. Hence, the main goal for the case study was to develop a framework that characterises information on receiving and attracting FDI in Brazil and its socio-economic impact which was then studied through evaluating the public policies regarding universalisation of access to electrical energy. (Bremermann 2016.)

Throughout the project there were multiple questions raised about the role of MNEs in the rural electrification of Brazil. The main questions were

- Have MNEs contributed to electricity supply?
  - What were the main reasons for choosing the location of operation in the country?
  - Why were the rural electrification policies successful in the south but not in the north of the country? What are the main differences between those regions?
- (Bremermann 2016)

The results of the Luz para todos programme are seen in figure 8.



Source: A Framework Model on MNE's Impact on Global Development Challenges in Emerging Markets 2016.

Electrification is crucial for the development of the rural areas. This became evident during the MNEmerge project as it identified challenges in attracting companies to operate in rural areas in Brazil. (Väättänen & Teplov 2016) The problems with electrification make the areas less attractive as there are more challenges in operating business activities and often the purchasing power is lower in those areas. A solution for this could be government based incentives for the MNEs to encourage them to start the operations and to help them in the initial stage.

Three larger entities of policy recommendations were proposed based on the case study. The suggestions are in line with the sustainable activities of rural areas, sustainable way of generating electricity, and local socioeconomic development. The entities were based on capabilities building, social and economic benefits, and renewable energy adoption.

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The first policy recommendation entity, capabilities building, aims to attract more MNEs and develop the human capital in the rural areas. The low capabilities of the local companies, the insufficient level of education, and the fact that the MNEs are reluctant to invest in workforce training were challenges identified by the MNEmerge project. Hence, the policy recommendations include supporting the local entrepreneurs and creation of combination of regulations and incentives for MNEs to invest in local capabilities building. The government should encourage MNEs to invest in local training and the local entrepreneurship initiatives should be supported so that new companies would emerge. These activities would help not only in developing the human capital in the rural areas but also in ensuring that the skilled workforce would stay in the regions.

The second policy recommendation entity concerned the social and economic benefits that would help to achieve the MDGs and SDGs. An optimal balance should be created between the regulatory incentives and regulation issues. After all, companies need to be profitable in order to conduct business but they also need to take the local people into account and understand their lack of purchasing power. This could be achieved by providing the MNEs with incentives for the initial stages that could be later removed as the region starts to develop. For this to be successful, the local stakeholders, including the communities, need to be involved in the actual program planning and implementation. The key is to learn from best practices, both domestic and foreign. (Bremermann 2016; Väättänen & Teplov 2016.)

The third policy recommendation entity concerned renewable energy adoption. When bringing electricity to rural areas, the only viable alternative for the electrification are the hybrid renewable energy systems with local energy sources and combined electric energy storages that can supply individual consumers or mini-grids. The local energy sources depend on the region. The optimal mix of various energy sources, such as wind, solar or hybrid, can be estimated in respect to each region's objectives. However, such off-grid systems need to be designed in respect to technical sustainability and the further extension needs to be taken into consideration as the demand grows. It is essential to develop clear environmental regulations and incentives for adoption of renewable energy based solutions. This will, in turn, create a prospective market for MNEs that will lead to win-win situations. The support of renewable energy systems adoption will increase local work opportunities, facilitate knowhow diffusion, and improve access to electricity. It will also support sustainable development and enable the economic development of remote areas. The policies are important as the electrification process continues because it

should be done by using the latest technology and sustainable energy resources instead of using other energy sources that have environmental consequences. (Bremermann 2016.)

The electrification of rural areas has wider impacts to the society that one might think. It does not simply mean lights so that people can see in the dark, but it enables the development of the whole region as the productive time is increased. It also means that new technology can be introduced to the remote areas which brings new sources of information available. When rural areas develop and attract more and more MNEs and other business, it relieves some pressure from the packed cities as well and thus can even balance the development of the whole country.

Another important matter is the use of renewable energy. As the rural areas receive electrification, it is done in a sustainable way from the beginning. Thanks to the new technologies, the use of pollutive and non-renewable energy sources can be skipped and the renewable systems straight adopted. Especially in the developing countries this needs to be efficiently encouraged and incentives to use sustainable energy and clear environmental regulations that support the progress must be adopted.

## 6 Knowledge transfer in Ghana



Source: UN 2016

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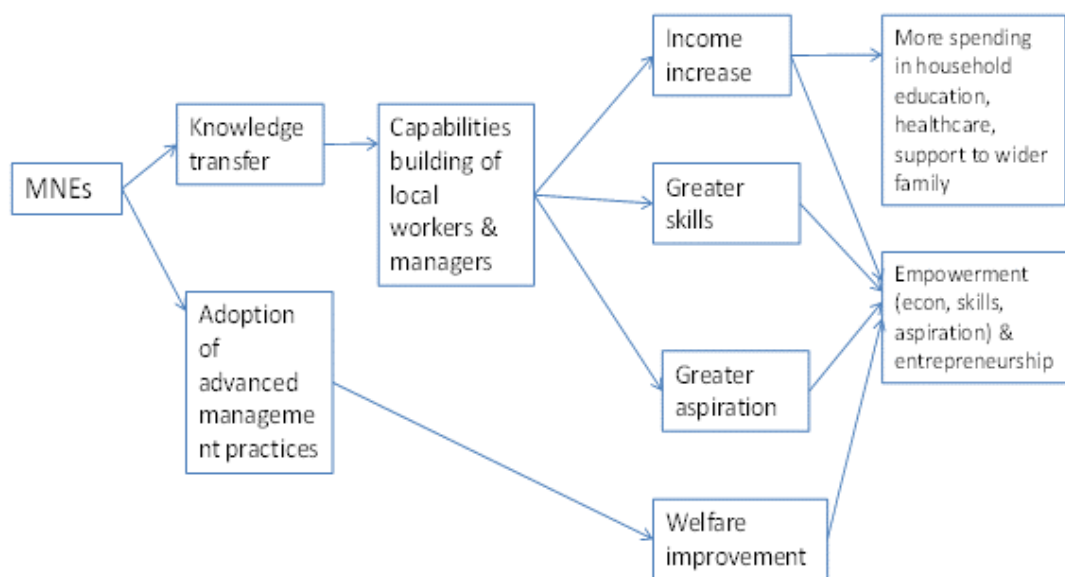
The case study in Ghana focused on knowledge transfer between the MNEs and locals. The topic is essential for the MDGs and SDGs as recent studies indicate that the bottleneck of economic development is not the backwardness of technology but rather the lack of managerial capabilities in the developing countries (Sutton & Kpentey 2012; Hausmann 2013). Given that there is demand to break the capabilities bottleneck for growth, job creation, and poverty reduction, it is crucial to understand whether and how MNEs can help local companies in building managerial capabilities.

There are three main channels through which management knowledge is likely to spill over from MNEs to local companies: movement of labour, the demonstration effect and the diffusion of management practices. The movement of labour occurs when MNEs train their employees and the trained workforce move from foreign to local companies for higher salaries or senior positions, carrying with them the new management practices. In the demonstration effect the management practices of MNEs are observed by their competitors, suppliers and clients through demonstration-by-implementation and word-of-mouth. This allows both industry specific and general managerial knowledge to diffuse within and cross industries. The last one, the diffusion of management practices may take place in the supply chain when MNEs may purposefully transfer relevant knowledge to their suppliers or customers.

In addition, the MNEmerge project aimed to analyse differences between the Chinese and European MNEs. In recent years, FDI flows from China to Africa have been increasing rapidly but the research of their impact on the economies is limited which is why the Chinese MNEs were included in the study. The aim of the study was to understand the role that MNEs play in knowledge transfer to the local employees, local communities, businesses, and economic and social communities. Furthermore, the impact of transferred knowledge, if there is any, affect skills, income, aspirations, and other welfare aspects of the local employees and the community was analysed. Consequently this case study was more focused on the MNEs and their internal workings than the other case studies. The other case studies dealt more with the impact of different CSR activities affect the society while in Ghana it was the policies that the company has in terms of conducting the business that were studied; who they hire, from where and what does that mean for the company and the society at large. Of course these goals were also analysed in terms of their relation to the MDGs and SDGs. (Frempong 2016, Fu 2016)



There are several indicators of development that are enhanced by the knowledge transfer as seen in figure 10. First of all, when the local capabilities are built, the increased knowledge of the local managers and workers will lead to more innovations and productivity growth in local companies. Secondly, the enhancement of capabilities affects the income growth of the employees. There are also non-financial development indicators that follow the capabilities enhancement, e.g. aspirations, career development, work conditions, household spending on education and health. Furthermore, the capabilities are increased at both company and employee levels.



Source: A Framework Model on MNE's Impact on Global Development Challenges in Emerging Markets 2016.

The local partner for the case study was Science and Technology Policy Research Institute (CSIR-STEPRI). The University of Oxford was also involved with the case study and conducted interviews in Ghana. Other policy makers were also engaged in Ghana such as the Ministry of Industry and Trade, and the Ministry of Environment, Science and Innovation, and also in the United Nations, such as UN DESA and UNIDO. (Fu 2016.)

MNEmerge wanted to find out how exactly the MNEs are contributing to the overall development and capability building in Ghana. The results were encouraging as there were some evidence that MNEs are supporting poverty eradication and they are also contributing towards capability building in local companies. (Frempong 2016)

The data for the study was collected at employee and firm levels. For the firm level data 500 firms in Ghana were interviewed in 2013 and 2015. The employee level data was collected through interviews and questionnaires among 61 managers and 173 employees. The selected companies were from four different industries: ICT, pharmaceuticals, textile and construction. These represented both knowledge-intensive and labour-intensive sectors. In addition, there was one multinational from Europe, and one comparative multinational from China in order to analyse the differences between European and Chinese MNEs. (Fu 2016) The companies involved in this study were:

- Vodafone Ghana (UK)
- Huawei Ghana (China)
- GoKals-Laborex (France)
- Sanbao pharmaceutical (China)
- Textiles Ghana (Netherlands)
- Akosombo Textile (China, Hong Kong)
- Acticon (Portugal)
- Top International (China)

Four larger groups of findings based on the case study were made. The groups were based on knowledge transfer, differences between the Chinese and Western multinationals in terms of their managerial knowledge transfer, impact of the acquired skills on skills development and aspirations, and impact of adopting advanced management skills on welfare of the local workers and managers.

The evidence shows that there is some level of knowledge transfer going on but it is not evenly balanced and it not solidly structured. In short distance, person to person, significant and immediate knowledge transfer was observed. However, the long-distance knowledge transfer is limited and varies between industries. The long-distance knowledge transfer occurs between the multinational and the local suppliers and other partners along the supply or value chain. (Frembong 2016; Fu 2016.)

In addition, there were significant differences in managerial knowledge transfer between intra- and inter-firms. Within the firms, there were significant managerial knowledge transfer to the local managers and the local workers. On the other hand, the inter-firm

linkage is limited, which causes a limited knowledge transfer to the local suppliers and also other local collaborators within the economy along the supply chain. However, there are exceptions, for example in the construction and telecommunication sectors. In the construction sector there is a fast growth in the local industrial plastic industry and the local companies are providing their products to the MNEs. Thus, the supply chain effect was observed. In the telecommunications sector, in Huawei, the company representatives have regular meetings with their local suppliers, explaining in detail the quality and delivery requirements, and so on. Hence, the inter-firm linkage varied among different industries, but in some sectors the linkage is very limited. (Frembong 2016, Fu 2016.)

The policy implication from these findings, is that policies should encourage, foster, and even demand, more inter-firm collaboration and the linkage, and also local sourcing. (Fu 2016) This would enhance how knowledge is transferred. On the other hand there needs to be policy implications that counteract the limited linkage. The weakness of the linkage is caused by the fact that the local labour market and the skills of the workforce, are still limited. Therefore MNEs provide training within their company to meet their standards and requirements when collaborating with other companies. As a result, MNEs should be encouraged to adopt management practises which enhance skills, welfare aspiration and empowerment of local employees and managers. This could be achieved through training, non-monetary rewards and positive feedback.

The second group of findings concern the differences between the Chinese and European MNEs in terms of their managerial knowledge transfer. The Chinese MNEs in Africa have been an interesting phenomenon for a while which is one of the reasons they were studied in the project. Their actions in terms of knowledge transfer was analysed and then compared with the actions of the European companies. The differences can partly be explained by language barriers but also to a great extent, by the cultural differences in both the national and corporate culture.

The European MNEs were found to be much decentralised, whereas the Chinese MNEs were more centralised type of network, with interpersonal structure. Therefore, the middle-level managers in European MNEs had more freedom, were more empowered, and learned more at the middle manager level. However, the blue-collar workers, especially young junior workers reported learning much more in Chinese MNEs. Because of the more centralised style, the middle-level managers had more of a hands-

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on management style and the workers get more interaction and advice from the middle-level managers. (Frembong 2016; Fu 2016.)

Furthermore, the Chinese MNEs were found to be competitive and to have a general aptitude for hard work. They also have an adaptability to technologies in the developing countries' context and flexibility in their hands-on management style and maintaining low costs. On the other hand, the European MNEs employ more locals with higher educational background, also to managerial positions. They are also more gender sensitive. (Frembong 2016.)

Regarding to the third group of findings, it was found out that the knowledge transfer does have impact on the skills development and aspirations of the local workers and managers. This impact is especially evident among the young generation. The young find the development especially important, resulting in greater aspirations considering their future development. In addition, the case study revealed that it is not the monetary incentives that give the workers more aspiration and development. The monetary incentives may improve the efficiency of the company and the workers may work harder, but it is not effective in terms of their capabilities development and aspiration. The non-monetary incentives such as positive feedback, mentoring, empowerment, and equity for women, have greater impact on skills development and aspirations enhancement of the local workers. (Fu 2016.)

The fourth finding was that the MNEs, by adopting more advanced management skills, can have positive impact on welfare of the locals, through both direct and indirect channels. The direct channel is managing practices that improve workers' welfare, such as maternity leave, empowerment, or women equity. The indirect improvements come through more stable jobs with the MNEs. Local workers can have more stable contracts with the MNEs, while the domestic firms might not have formal contracts at all or only on fixed-term, causing fluctuations and disturbances. This means that the MNEs are able to offer more stable jobs with stable income and higher social status, all of which improves the overall welfare even further. (Fu 2016.)

All in all, knowledge transfer is crucial factor in the economic development. In order for it to be effective, the MNEs should be encouraged and motivated to enhance their knowledge transfer practices both in intra and inter-firm contexts. The building of capabilities also has fringe benefits as it can create a positive cycle that affects the whole

society in a sustainable way. The differences in the efficiency of knowledge transfer at different levels found between the European and Chinese MNEs were especially interesting. In the European MNEs the middle-managers have the highest level of learning while in Chinese MNEs the highest level is for the blue-collar workers and the young.

## **7 Summary of policy recommendations and implications on sustainable business**

One of the main goals of the MNEmerge project was to understand the role of MNEs in sustainable development. The framework and case studies aim to have future implications on sustainable business. It is, however, a long process as there is a need for policies to change in multiple different levels. As the project is now in its dissemination phase, the long-term implications are not yet seen and thus the following are only suggestions and educated guesses that could become reality in the years to come. (Gupta 2016; Väättänen & Teplov 2016.)

Companies can gain a lot from the insights this project is providing. Most of the insights are directed to developing countries in general and thus the policy recommendations can be used in wider scale than just in the case study countries. There is a lot to be achieved if the recommendations are heard by the different institutions and MNEs. (Parihar 2016) However, the project is very broad in nature which is why it is likely that the effects and impacts of MNEmerge are seen quicker at the local level. The local project partners have a lot of influence in their countries which means that they can make things move faster. One outcome from this could be a stable institutional situation created at the local level where the MNEs can operate profitable and at the same time the locals can benefit from their operations. (Frempong 2016; Väättänen & Teplov 2016.)

All in all, the implications are generally positive in nature. For example, the Ghana case study alone was about social sustainability, inclusiveness, and the benefits to the local community, both at the manager and blue-collar employee level. These will further impact the local families through welfare improvement, income growth, and aspirations for their future development. Furthermore, the study shed light to the importance of the development of the youth which is one of the most important contributors to sustainable business based on this research. (Fu 2016.)

The policy recommendations and the insights from the project all aim for a better future where the business operations are sustainable and the MNEs work together with governments and NGOs to achieve the ultimate goal of a better world. The summary of the policy recommendations is found below.

<b>Policy recommendations</b>	
<b>Access to sanitation:</b>	<ul style="list-style-type: none"> <li>• Sanitation seen from a holistic perspective</li> <li>• Cultural shifts needed</li> </ul>
<b>Access to medicines:</b>	<ul style="list-style-type: none"> <li>• The nature of FDI from brownfield to greenfield</li> <li>• CSR streamlined and a clear framework to be created</li> <li>• Use of the flexibilities of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) should be appropriate to balance the interests of the right owner with larger public interest.</li> <li>• Implementation of context specific pharmaceutical price regulation for exorbitantly priced medicines would be crucial in order to ensure the access to those medicines.</li> </ul>
<b>Rural electrification:</b>	<ul style="list-style-type: none"> <li>• Capabilities building</li> <li>• Stimulate activities to capability enhancement</li> <li>• Incentives for skilled workforce to stay in rural areas</li> <li>• Optimal balance created between incentives and regulations</li> <li>• Incentives for MNEs to invest in remote areas</li> <li>• Renewable energy adoption</li> <li>• Hybrid solutions created</li> <li>• Clear environmental regulations</li> <li>• Incentives to use renewable energy sources</li> </ul>
<b>Knowledge transfer:</b>	<ul style="list-style-type: none"> <li>• Policies to encourage, foster, and even demand more inter-firm collaboration and the linkage, also local sourcing</li> <li>• Policies developed where MNEs are given incentives to build capabilities</li> <li>• Differences between the Chinese and Western multinationals in terms of their managerial knowledge transfer</li> <li>• Impact of the acquired skills on skills development and aspirations</li> <li>• Impact on welfare of the local workers and managers.</li> </ul>

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## 8 Conclusions and further research ideas

Research has shown that the goal to end poverty and hunger, among other things, cannot be reached by aid given by foreign governments and NGOs alone. Aid is not a sustainable solution but rather a temporary one. The emerging markets can only rise through economic development which means that the MNEs, governments and NGOs need to give them the tools to do so. Therefore, it is not enough to look at poverty reduction but instead to economic development as that is the key to achieve the MDGs and SDGs. (Ghauri 2016)

Developing countries are battling with multiple socioeconomic issues which the governments and NGOs have been trying to solve in the past decades. The progress has, however, been too slow and incremental to really help entire economies. The main socioeconomic issues have been listed in the MDGs and SDGs. There are many reasons and explanations offered to why these issues still prevail while there is the technology available to rise to the same level as the developed nations. The MNEmerge project aimed to shed light on the role of the MNEs in this phenomenon through empirical case studies in three countries.

The case studies in India looked at the access to sanitation and medicines. According to the study sanitation has much larger impact on the society than thought and the usage of sanitation facilities necessitates some changes in culture in order to be successful. Proper sanitation and waste management effects health, equality and security as well as poverty. The access to medicines, on the other hand, saw that although the Indian pharmaceutical companies lead by their market share, the MNEs are needed as they are the ones introducing new medicines to the country. Thus FDI is important and many policy recommendations were made to encourage greenfield investments over the brownfield investments.

The second case country was Brazil, where the impacts of rural electrification were analysed. The electrification improves the productivity of the local society and gives the locals more opportunities by enabling new technology and information sources. Furthermore, the electrification will hopefully attract MNEs and other companies in the rural regions which would have a dual effect; the rural communities would develop further and it could ease the pressure of big cities. On the sustainability side it is also noteworthy that the rural areas receive their electricity from sustainable energy sources which is better for the environment as well.

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The last case country was Ghana where the knowledge transfer was studied. The lack of knowhow is one of the main bottlenecks of economic development and thus it was important to study the process itself and the involvement of MNEs in the transfer process. As the case study was conducted in Ghana Chinese MNEs were also interviewed and their knowledge transfer practices were compared to those of European MNEs. The findings were interesting as different employees benefitted from different companies. All in all, it was found that especially inter-firm knowledge transfer is rather limited and thus there is much to be done with that. The knowledge transfer does not only enable economic development but it also effects individuals through aspirations, stable jobs, and increased income levels. The impacts of knowledge transfer are limited mainly to the individual level at the moment but through policy recommendations the impacts could be seen in the wider scale as well.

The study was an important milestone in making efforts to eradicate poverty from the world. Its impacts will be seen in the upcoming years when the policy recommendations are considered and implemented throughout the world. At the same time, many new research ideas surfaced through the study.

More research is required on analysing multinationals and their role in poverty and these issues could be solved and what role does each stakeholder play. These local stakeholders include international agencies, MNEs, companies, governments and social enterprises. In the end, all of these players need to work together in order to sustainably achieve the goal of eradicating poverty. (Parihar 2016)

When the MNEs impact in emerging markets was studied, the researchers saw that the framework needs to be developed further and the whole issue of poverty reduction needs to be looked more holistically. Instead of looking purely poverty reduction and actions for it, the focus should be redirected towards economic development issues. MNEs, NGOs and governments should work together for economic development. (Ghauri 2016) In addition, three themes from the MNE and the framework side need to be taken into consideration in future studies: corporate brand management, mergers and acquisitions and distribution and sales management. (Gupta 2016)

Access to medicines case study in India recognized the need for more comprehensive research in terms of FDI and more specifically about the decision making process between greenfield and brownfield investments. Another factor that needs more attention



is the CSR itself and the ways business decisions are based on. It is important to know how much the activities actually help patients through patient access programmes and the causes of access to medicine in general. (Mehta 2016) Additionally, in many developing countries CSR is in its early stages which means that clear regulations and frameworks are needed in order to integrate the CSR activities in the business as usual.

The electrification in Brazil's rural areas case study recognised that important future research topics include for example economic feasibility study and the use of biomass in hybrid power generation systems. (Bremermann 2016) The Ghana case study identified an in-depth analysis of the networks and the knowledge transfer channels and the mechanisms as an important research topic as it is essential to understand how knowledge transfer and capabilities building within MNEs can be improved. It is also important to understand how more inter-organisational linkages between MNEs and the local workers can be fostered. (Fu 2016)

All in all, several future research ideas emerged from MNEmerge. Each of the case studies can be developed further as can be done with the overall framework. It would also be important to see how the cases and the policy recommendations work in other countries. The project was a significant mile stone in understanding the role of MNEs in sustainable development and the future research can continue the work.

To sum up, the results of MNEmerge shed light to future policies and further actions that can be taken into account all around the world. The project was broad but it also highlighted multiple crucial aspects that need to be considered when trying to achieve the SDGs. Sustainable development and business are the key for a better future where all people would have equal opportunities. There is a long way to go and the MNEs are one of the main gatekeepers and enablers of sustainable economic development in emerging markets.

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