Effective development and resilience building: the EU and NATO perspective compared

George-Mihael MANEA[*]

Abstract

The EU and NATO represent two entities in charge of the protection and self-sufficiency of their communities, being engaged in development activities and resilient-oriented projects at various levels. Despite their different approach on effective development and resilience building, their mission has convergent aspects in order to ensure that the EU development goals impact the self-sufficiency of a household and the NATO agreed baseline requirements improve the level of civil preparedness and protection within the communities. Development and civil protection put the EU and NATO in the middle of the puzzle, providing technical expertise and tailored assistance for the countries in need, as well as to identify and anticipate possible vulnerabilities that might occur in both developing and developed countries. The role played by both the EU and NATO on the world stage come to highlight the importance that the two actors bring in the actual unpredictable environments.

Keywords: resilience, development, community, EU, NATO

Introduction

Development activities contribute to the implementation of various projects and programmes at different levels, and their sustainability leads to resilience building in local communities and international society. The EU gives more than half of the development aid globally in order to achieve specific targets in development, however the EU is not undertaking this huge challenge on its own. It worked together with major international organizations such as the United Nations and the World Bank, as well as NATO within security and civil protection framework. Sustainability goes beyond any divisional project. It is the society vision that provides confidence on building sustainable projects and gives hope that the impossible could become possible on medium and long term.

---

[*] George Mihael MANEA served as a Junior Professional in the EU Delegation to Gabon, Equatorial Guinea, Sao Tome and Principe and the Economic Community of Central African States, from 2014 to 2016. He started his doctoral studies in political science at the West University of Timisoara, being interested in issues related to development and security; e-mail: george-mihael.manea@coleurope.eu.

The research goal of this paper is to provide a comparative overview between the EU and NATO related to development activities and resilience building, in order to diminish the societal and community vulnerability in times of change and uncertainty. Starting from the central research question "to what extent the EU's development assistance efforts and NATO's civil protection instruments contribute to increase the level of resilience in both developing and developed countries?". Resilience is not a new concept, however there are different approaches and perceptions regarding its definition. In my opinion, it can be defined as the sustainability fulfilment within a particular cross-cutting sector based on specific requirements. The same principle applies for both the EU and NATO, but the implementation measures differ according to the final target established.

In order to answer to the research question of this paper, I identified two hypotheses that will be verified along this research through the qualitative methodology tools: (i) resilience is not a goal, it is rather an ongoing process at the EU's level (starting with the Millennium Development Goals in 2000) and relatively new at NATO's level (framed and adopted at the Warsaw Summit in 2016); (ii) effective development can be achieved through the EU's sustainable projects and NATO's civil protection means in order to build resilient communities. These hypotheses will be investigated along this paper, and even if the EU and NATO seems to have a different focus in their approach to development and resilience, they have the same objectives for both developing/partner countries and developed/allied states.

It is an important topic as the analysis will provide some missing links in the actual literature. The first part of the paper will focus on the importance of the Millennium Development Goals (MDG) as part of the EU development process in poverty eradication and the transition towards the Sustainable Development Goals (SDG). Water facility and food security are important pillars in reaching the development goals and building resilient communities. The second part of the paper will refer to resilience building in a globalized and confrontational world, where constant adaptation is required in order to overcome vulnerabilities and emerging threats. NATO adopted and adapted the resilience concept based on some agreed baseline requirements in order to complement military defence with civil preparedness and community/society protection.

1. The EU's role in building resilient communities

The EU foreign policy can be analysed in the post-Lisbon era as "following a one dimensional 'stop-and-go' spill over logic" (Cardwell, 2012, p.35), with an integration process situated in a constant flux of centrifugal and centripetal effects (Tekin, 2012) that design more the interest for

national policies rather than a consensus for supranational decision. Although new informal working methods and incremental development on different dimensions such as decision making, funding or even external representation, helped the EU member states to keep a balance between the institutional stability, the coherence level and the flexibility in providing responses and reactions at different levels (Smith, 2004).

Thus, the European Union is described as an "engine of global transformation" (Sjursen, 2012, pp. 4-5) and aims to build well-functioning institutions, in a stronger international society, using all the institutional tools and mechanisms that may reinforce cohesion and coherence of its external action (Blanke and Mangiameli, 2012). The main goal of the EU is to find a common direction for all its institutions and to reinforce the cooperation with counter-parts organizations, as it is the case with NATO.

In terms of project implementation, monitoring and evaluation, as well as support of the development goals, the EU was a substantial promoter of the Millennium Development Goals (2000-2015), while at the same time being the largest donor and supporter of developing countries in achieving the MDGs[1]. At the same time, the achievement of the MDG targets was scheduled for 2015 and an effective analysis was required in order to frame new strategies within the Agenda 2030 referring to the Sustainable Development Goals[2], more complex, comprehensive and global.

Financial assistance is one aspect of the EU's support, but it is paramount to know what criteria need to be fulfilled in order to reach sustainable development and what cycle to be followed in order to implement these criteria. To the question "What needs to be done?", the MDGs/SDGs provide an answer based on different targets of action that have been agreed upon by every single country. To the question "How can be done?", the *2005 Paris Declaration on aid effectiveness* set up the rules and a clear objective: give more money for the development goals and organize them better in order to reach specific targets.

---

[1] Millennium Development Goals highlighted the importance of eight targets to be achieved by 2015 as follows: MDG 1: Eradicate extreme poverty and hunger; MDG 2: Achieve universal primary education; MDG 3: Promote gender equality and empower women; MDG 4: Reduce child mortality; MDG 5: Improve maternal health; MDG 6: Combat HIV/AIDS malaria and other diseases; MDG 7: Ensure environmental sustainability; MDG 8: Develop global partnership for development, retrieved from http://www.un.org/millenniumgoals/.

[2] Sustainable Development Goals brought into the game a large nuSDG 1: No poverty; SDG 2: Zero hunger; SDG 3: Good health and well-being; SDG 4: Quality education; SDG 5: Gender equality; SDG 6: Clean water and sanitation; SDG 7: Affordable and clean energy; SDG 8: Decent work and economic growth; SDG 9: Industry, innovation and infrastructure; SDG 10: Reduced inequalities; SDG 11: Sustainable cities and communities; SDG 12: Responsible consumption and production; SDG 13: Climate action; SDG 14: Life below water; SDG 15: Life on land; SDG 16: Peace, justice and strong institutions; SDG 17: Partnership for the goals, retrieved from http://www.un.org/sustainabledevelopment/sustainable-development-goals/.

1.1. Water Facility

To begin with, "water is a primary human need and water supply and sanitation are basic social services. It is a fundamental economic and environmental resource, and is thus a key issue for poverty reduction, sustainable development and the achievement of the MDG on water" (Resolution of the EU Council, 2002, p.33)

Inequitable distribution of the water, lack of adequate water management and water pollution represents important challenges at the global level. These problems affect developing countries and could conduct to a water crisis on potable water and lack of sanitation, being considered as one of the major causes of disease and death at the global level (European Commission, 2008).

According to the United Nations statistics, "overall, about 1.1 billion people on Earth do not have access to safe drinking water and about 2.4 billion people lack adequate sanitation. An estimated 6000 children die each day from diseases associated with poor sanitation and hygiene" (European Commission, 2003, p.4). For instance, in most ACP countries, demographic growth and climate change can sometimes have a tragic impact on water quality, which is the leading cause of diseases.

Water resource management in developing countries, efficient and equitable use of water, depends on policy planning and programming process, as well as on the capacity to build strategies (European Commission, 2002). Key objectives were developed through different policies such as the *EU Water Initiative*, highlighting the importance of water management, water supply and water security within the Millennium Development Goals framework.

The key objectives of the *EU Water Initiative* refer to the promotion of water governance, water resources management through open dialogue and efficient co-ordination among governments, mechanisms to develop sustainable financing projects for access to potable water, reinforcement of political commitment with emphasis on innovation and sustainability in order to give people the capacities to solve their problems (European Commission, 2003). It is essential to highlight that "water resource management and access to safe water and basic sanitation are crucial for both economic growth and poverty reduction [...] it is important to meet basic water and sanitation needs and contribute to improved water resource management at local, river basin and catchment, national and trans-boundary level" (General Secretariat of the Council, 2011, p.45).

Agriculture seems to be the most water-dependent sector in some developing countries where "irrigation accounts for 80% of water use" (European Commission, 2002, p.4). Moreover, the "mismanagement of water (e.g.: unsustainable irrigation practices) can lead to drought and desertification" (European Commission, 2002, p.4). Industry represents the second most water-

dependent sector and a major polluter in the same time, which requires "cost-effective and ecologically suitable technologies […] to invest in pollution management systems" (European Commission, 2002, p.20). The energy field underlines the importance of hydropower development as water plays a crucial role in this cross-cutting sector of great importance at global level.

Nowadays the dependence on water is increasing, but "water has become a limited and vulnerable resource which is vital to protect" (European Commission, 2002, p.4). Based on this assumption, water will become "the single most important physical commodity-based asset class, dwarfing oil, copper, agricultural commodities and precious metals" (Buiter, 2014, p.5). The EU's aid for development focuses on "integrating the management of land and water resources […] particularly in the areas with competition over water resources, and calls for improved water use efficiency in agriculture which is the largest user of freshwater" (European Commission, 2002, p.10). The importance of integrated management for water resources and water services management is useful for different reasons such as linkage "between upstream and downstream areas within river basins, between water quantity and quality aspects, and between social and environmental aspects" (European Commission, 2002, p.7).

Water does not represent a "commercial product but a heritage which must be protected and defended" (European Commission, 2003, p.2), a key element that could be analysed as well in relation with the other two elements: food insecurity and poverty reduction. However, it should not be forgotten that water represents a sensitive issue at the global level and it is important to realize the right to water request different practical approaches: rights holder (national legislation and policies), international human rights obligations, sustainable development programming.

1.2. Food Security

We will move next to food security, an important chapter in guaranteeing the self-sufficiency of a household, as *"food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and food preferences for an active and healthy life"* (FAO, 2013, pp.16-17).

The terms food and security mean not only the unavailability of food, but also the people's lack of means to gain access to it. Food insecurity is a complex phenomenon which can take different forms depending on the region and context: climatic conditions, rain, communication methods, all of these making different situations across the countries, for which responses must be provided in an appropriate way.

In order to avoid food crises and emergencies caused by the collapse of food supplies, food aid can be essential in all its forms: from food delivery to cash transfers. But, in both cases problems might occur because food aid is usually "not only difficult and costly to transport, but often takes long to arrive" (Wiggins and Slater, 2010, p.140). In order to make aid more effective, the EU injects money directly into government's budgets of recipient countries, on the condition that they demonstrate good governance and respect for human rights. In other situations, aid transfer via foreign NGOs is preferable, especially in conflict zones, where the governments concerned do not provide sufficient guarantees that the donations will be correctly used.

The EU food aid can be offered as well through "increased investments in agricultural assets, including farm implements and livestock" (FAO, 2013, p.10), and trainings in order to ensure the development of local production (e.g.: management of stock cereals, diversification of cultivations, regeneration of the grazing land in order to protect animals). Progressing in "meeting the food needs, good-quality cropland and renewable water resources" (FAO, 2013, p.12), spell out development for the local population. Moreover, in order to achieve goals and have an impact on the ground, there is a need for "greater participation of civil society and farmers' organizations […] in policy making, implementation and evaluation" (General Secretariat of the Council, 2011, p.111).

At this point, four dimensions of food security should be questioned in order to guarantee the self-sufficiency of a household: food availability, access to food, food utilization and food vulnerability.

Food availability is necessary when "supplying enough food to a given population is a […] condition to ensure that people have adequate access to food" (FAO, 2013, p.18). Moreover "over the last two decades, food supplies have grown faster than the population in developing countries, resulting in food availability per person" (FAO, 2013, p.18). The food availability can result "not only from agriculture, but also from fisheries, aquaculture and forest products" (FAO, 2013, p.18), and according to the statistics "between 15 and 20% of all animal protein consumed is derived from aquatic animals, which are highly nutritious and serve as a valuable supplement to diets lacking essential vitamins and minerals" (FAO, 2013, p.18).

Access to food is based on economic and physical factors, as well as on the sustainability of the food policy. On the one hand, economic access is "determined by disposable income, food prices and the provision of and access to social support" (FAO, 2013, p.20) and investment in this factor could have positive consequences on the reduction of poverty rates. On the other hand, physical access is "determined by the availability and quality of infrastructure, including ports, roads, railways, communication and food storage facilities and other installations that facilitate the functioning of

markets" (FAO, 2013, p.20). However, food policy failure (e.g.: sheer mismanagement) can have consequences on people's access to food.

Usually, "progress in terms of food access and availability is not always accompanied by progress in food utilization" (FAO, 2013, p.21). This dimension of food security reflects "the food quality and preparations, health and hygiene conditions, determining how effectively available food can be utilized" (FAO, 2013, p.21). The challenges and obstacles should not be underestimated as financing land development, managing thousands of farmers, selling produce outside the region, maintaining the irrigation network could benefit from the help of the European Union.

To better understand the importance of water and food in the context of sustainable development and resilience building, it is required to observe the local needs, to propose a transformation process tailored to the community needs, to focus more on training and giving them the necessary skills in order to fight against poverty. The EU has the competence, the tools and the framework in order to get local communities out of poverty, however some elements should be taken into consideration in order to bring added value to the already existing activities, as follows:

- - to draft policies and strategies that can impact on the ground;
- - to work in coordination with local authorities, civil society, private sector and other donors (either international organizations and/or foreign NGOs);
- - to synchronize the development objectives timeline and to align the standards required from the donors' side in order to avoid duplication;
- - to exchange information as "the connections of people, through formal and informal channels, diaspora communities, virtual global networks and professional communities of shared interests are important drivers of international collaboration" (The Royal Society, 2011, p.63).

In this way, water facility and food security, together with "internet connections, logistic hubs, and river valleys [represent] sources for energy and water increasingly functions as regional catalyst" (Telò, 2014, p.276).

1.3. Fighting Poverty

To further assess the fight against poverty, in an attempt to reduce the gap between rich countries and more fragile countries, Europe is progressively stepping up its aid towards all developing nations. International co-operation is on the way with one clear goal: to promote a fairer world where solidarity prevails and to adopt policies that are universally beneficial and respectful to everyone: human rights, transparent decision making, institutions set-up. However, "geography is not

destiny, but geography strongly influences the ways economies can and do develop. Geography encourages exchange and human interaction. It also creates barriers and nourishes disputes and conflicts" (World Bank, 2013, p.7).

The "geography of poverty" (Sumner and Lawo, 2013, p.2) mirrors a multi-dimensional level of poverty that could be measured either from the point of view of living standards or from an income perspective[3]. Making a poverty comparison between the two categories is difficult in the absence of a common unit of measurement, but poverty can be measured independently within each category as such.

The standard of living is underlined through indicators of quality of life including "life expectancy at birth, the mortality rate of children, and enrolment rates in school" (World Bank, 2013, p.15). Low incomes represent "both a cause and effect of low level of health, education, and other human development outcomes" (World Bank, 2013, p.15). These two categories make a clear distinction on how poverty is divided: "poor people have a hard time obtaining good health care and education, while poor health and poor education leave them less able to improve their incomes" (World Bank, 2013, p.15).

Moving people out of poverty or "poverty mobility" (Sumner and Lawo, 2013, p.7) could be possible in the context of evolution and progress in terms of water resources management (irrigation systems, pollution management systems, building dams for hydropower development) and food security dimensions (food supply, adequate infrastructure for access, provisions, cereals stock learning management). Moreover, poverty is also linked to climate change that affects "all countries, but will be most immediately and severely felt in the poorest and most vulnerable countries, which do not have the means and resources to adapt to the changes in their natural environment" (General Secretariat of the Council, 2011, p.40).

In this way, it is paramount to link poverty reduction with the enforcement capacity and strategy building that will improve state-business relations in order to achieve development assistance and deliver agricultural and industrial progress (Wilkinson and Hulme, 2013). The biggest problem seems to be represented by fragile states, where the poverty rate in both low-income economies and middle-income economies reaches a total of 398.9 millions of people (Appendix II, table no.2). In this situation, attention should be focused on countries that may be "declared as poverty-free or making

---

[3] Low-income economies (LICs) and middle-income economies (MICs) are defined in appendix no.1. The international poverty lines, such as $1.25 and $2 a day, mirrors the proportion of global poverty in LICs, MICs, least developed countries according to the appendix no.2, table no.1.

progress in meeting the MDGs target, when in fact many of their citizens may be mired in poverty along multiple decisions" (Wilkinson and Hulme, 2013).

*

*   *

Water facility represented a strong pillar in achieving one of the MDGs taking into account that a large number of people lack access to safe drinking water. Furthermore, food security was considered a priority in fighting poverty. This is an existential challenge not only for the EU, but for the entire world, and more efforts are required from the developed countries in order to reach substantial progress in poverty eradication, such as more development aid, better policy coherence on development, more effectiveness; but also by the developing countries themselves: more ownership and more focus on the development goals.

The indicators underline that poverty eradication and water facility are on track with respectively 80% and 88% of the distance towards the goal already achieved. Food security in the form of undernourishment is still off track but has been slowly improving since 1990 (Appendix II, table no.3). Climate change affects "world food security and the livelihoods of smallholder farmers [...] food security is a major challenge since climate change is already affecting farmers across the world. Building more climate-resilient farming systems is key to climate smart agriculture" (Garrity, 2014, p.12).

The development agenda post 2015 leads to universal principles for both developing and developed countries, as well as sustainable goals and targeted impact. Water access is strongly linked to infrastructure development, but also to land rights which are not fully regulated in Africa; food security has to focus on food production, nutrition and hygiene, as well as to keep food prices at a low and stable level; while poverty should take into account social services and employment opportunities (Bergh and Couturier, 2013). Moreover, agro-forestry should be taken into account for further development "as it has too often been considered a type of forestry and the agricultural community has tended to ignore the potential of trees when grown in association with crops. But when grown among crops and properly managed, trees provide a source of biofertilisers, reduce temperatures, conserve rainwater in the soil, and produce abundant wood for cooking fuel and construction and nutritious fodder for livestock" (Garrity, 2014, p.12).

2. The NATO's role in resilience building through civil protection

In the actual unpredictable environments, while the EU works on its global strategy for development and security, NATO decided to develop the resilience concept and to build resilient communities at the level of Allied and partner countries. Thus, "in a globalized but also more confrontational and complex world, resilience will remain an ongoing concern for Allies, requiring constant adaptation as new vulnerabilities and threats emerge" (NATO Review, 2016). The new targets envisaged through the resilience concept refer to virtual vulnerabilities, civil preparedness, hybrid threats, civil-military readiness, stepping up cooperation with the EU and working with partner countries.

a) *virtual vulnerabilities*: NATO's toolbox related to cyber issues necessitates not only political consultation processes, but also inter-institutional links. Thus, it is important to highlight that "cyber space is perhaps the most extreme form of this vulnerability as it interconnects the entire planet in real time, making it possible for anybody to attack any electronically operated target from anywhere at any moment" (NATO Review, 2016).

Cyber crime, cyber espionage and cyber warfare are part of cyber security as "a collection of tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect the cyber environment and organization and user's assets [...] Cybersecurity strives to ensure the attainment and maintenance of the security properties of the organization and user's assets against relevant security risks in the cyber environment. The general security objectives comprise the following: availability; integrity, which may include authenticity and non-repudiation; and confidentiality" (Klimburg, 2012, p.12).

b) *civil preparedness*: it links to the "national responsibility, in the same way that Allies must ensure adequate cyber defence for their critical information technology networks, especially the ones that NATO depends on for its own operations [such as] assured continuity of government and critical government services, resilient energy supplies, ability to deal effectively with the uncontrolled movement of people, resilient food and water resources, ability to deal with mass casualties, resilient communications systems and resilient transport systems" (NATO Review, 2016).

The concept of resilience within the civil preparedness was highlighted during the NATO Warsaw Summit Communiqué as follows:

"we have taken a range of steps to reinforce our collective defence, enhance our capabilities, and strengthen our resilience" (Warsaw Summit Communiqué, para 4, 2016) and,

"civil preparedness is a central pillar of Allies' resilience and a critical enabler for Alliance collective defence. While this remains a national responsibility, NATO can support Allies in assessing and, upon request, enhancing their civil preparedness. We will improve civil preparedness by achieving the NATO Baseline Requirements for National Resilience, which focus on continuity of government, continuity of essential services, security of critical civilian infrastructure, and support to military forces with civilian means" (Warsaw Summit Communiqué, para 73, 2016).

c) *hybrid threats*: NATO is improving "its intelligence-sharing and early warning processes in order to better anticipate and map hybrid warfare activities" (NATO Review, 2016). Today, NATO faces new challenges that require contemporary approaches for defence from new threats and the need to support international peace and security. Thus, as asymmetric and unconventional warfare become more and more prevalent every day, NATO needs to identify the enemy clearly and be ready to answer the question: *How do we act in case, we are attacked?*. However, for resolving even this sole issue, NATO needs not only the military forces of the Allies, but also close collaboration with other countries.

d) *civil-military readiness*: NATO transformed itself and adapted to the new international architecture in order to respond to the new indirect and multi-directional threats, including adequate infrastructure such as "transport, flight corridors, civil-military airspace coordination, fuel stocks, pre-positioned equipment, port access and legal agreements are fully integrated into military planning" (NATO Review, 2016). Moreover, NATO has either played a direct role in political and social stabilization of volatile populations, or an indirect role in contribution of logistical support and assistance to other existing institutions managing the conflict.

e) *Stepping up cooperation with the EU*: in order to be successful in their operations, NATO and EU need to support each other on issues of common interests and have largely done so through initiatives such as *Smart Defence* as well as *Pooling and Sharing*. Otherwise, it will lead to the duplication of operations and missions, which is inefficient for both NATO and EU members. This is why complementarity is welcomed between the *NATO Smart Defence* concept and the *EU Pooling and Sharing* initiative, both of them being crucial in framing new coordinated actions, as well as to act

together coherently, effectively and efficiently in order to achieve tactical, operational and strategic objectives.

f) *Working with partner countries*: global partnerships are wide and diverse; however, some countries can play a specific and targeted role along a win-win partnership with effects resulting in development, security and joint operations. Furthermore, NATO's partners can help "to improve the Alliance's overall resilience […] their experiences and lessons learned can help NATO to better understand the type and impact of hybrid tactics" (NATO Review, 2016).

2.1. The NATO's agreed seven baseline requirements for resilient communities

In order to better understand the NATO's contribution in building resilient communities, both for Allied and partner countries, we will move next to the agreed baseline requirements referring to the: (i) assured continuity of government and critical government services, (ii) resilient energy supplies, (iii) ability to deal effectively with uncontrolled movement of people, (iv) resilient food and water resources, (v) ability to deal with mass casualties, (vi) resilient civil communications systems, and (vii) resilient civil transportation systems (Appendix III). As it can be seen, food and energy are again part of the main requirements to proof sustainable development and resilience building with different communities at the global level.

If the EU is focused on the development activities related to the implementation of various projects and programmes in crucial cross-cutting sectors in order to develop local communities, NATO is trying to ensure at its turn the self-sufficiency of a community in order to become resilient through the continuation of the services, energy supplies, food and water resources, communication means and transportation systems. The cooperation between public administration authorities, public institutions and international organizations is crucial in order to increase the level of resilience and to ensure the right measures for the protection of local communities.

From this point of view, it is important to ensure the transfer of authority, the continuity of communications, assessment and training in order to provide the necessary skills to local communities. It is required to ensure the continuity of political and administrative command of the developing/partner country, especially by removing the population from the affected area in other locations/areas with optimal security conditions, while ensuring the necessary conditions for local and central authorities to carry out their activities.

On the same note, food and water should be sufficient in order to feed the civilian population. As this is a critical resource, identification and protection of the critical infrastructure is paramount, as well as to create stocks, to ensure their physical protection and to make sure there are means of transportation for rapid deployment. It is also important to provide a minimum volume of water reserves in major reservoirs, stocks of coal of relevant producers of heat produced on coal and reserves of crude oil for those plants that are able to run on this fuel. At the same time, it is required to provide the additional balancing energy reserve for some groups that can switch from running on natural gas to the crude oil in order to keep them in operation in case of shortage in the gas network. Having communication facilities and information technology, this can lead to integrated systems able to minimize the risks and vulnerabilities at the level of local communities.

Conclusion

The EU and NATO are both engaged in reaching a high level of resilience in local communities, not only in developing and/or partner countries, but also at the level of their member states. Lessons were learnt from mistakes made in the past and both the EU and NATO are now focusing more on the objective of giving people the capacities to solve their own problems, as well as to encourage the self-sufficiency of populations and also their security through civil preparedness and protection.

The hypotheses identified at the beginning of this paper come to answer to the central research question "to what extent the EU's development assistance efforts and NATO's civil protection instruments contribute to increase the level of resilience in both developing and developed countries?". Both hypotheses were validated in the sense that the EU made the transition from the MDGs to the SDGs, meaning a change of approach in terms of development: a swift from funds injection to training and know-how through projects and programmes targeted to the local needs of the community; while NATO started to balance the military importance with civil preparedness in order to make communities more resilient and prepared in front of various risks and vulnerabilities. In this way, both organizations contribute decisively to reach different goals and targets in development, resilience being a process that can be adapted according to the changes that might occur in our unpredictable environments where we live.

Water facility, food insecurity and poverty eradication will continue to represent a priority and new development assistance programmes will be required. In order to make a significant difference, the EU needs to focus more on the so-called policy coherence for development, because aid is not enough and the populations need also training. On the other side, at the NATO level, risks and

vulnerabilities reduction are thus an expression of moral and social responsibility at all management levels and it can be accomplished through public determination, resilience awareness and increased cooperation between the EU and NATO.

To conclude, the EU development efforts and NATO civil preparedness contribute to the effective development and resilience building at the global level. Both actors have the potential to bring their expertise, skills and capacities in order to provide technical assistance and risks management training to local communities from both developing and developed countries (in the EU's case), as well as member and partner states (in the NATO's case).

References

Bergh, G. and Couturier, J. (2013), *The post-2015 agenda: analysis of current proposals in specific areas*, Background briefing prepared for an Overseas Development Institute and UN Foundation event, New York, retrieved from https://post2015.files.wordpress.com/2013/07/ny-event-briefing-output-revised-final.pdf.

Blanke, H.J. and Mangiameli, S. (2012), *The European Union after Lisbon. Constitutional Basis, Economic Order and External Action*, Springer, Berlin.

Buiter, W. (2014), quote in the article of Thorp, S., The hidden cost of land acquisition, *SPORE - the Magazine for Agricultural and Rural Development in ACP Countries*, No.170, the Netherlands, June-July, pp.4-5.

Cardwell, P.J. (2012), *EU External Relations Law and Policy in the Post-Lisbon Era*, TMC Asser Press, Hague.

Council of the European Union (2002), *Resolution of the Council of the European Union on Development 8598/02 (2002)*, 2429th Council Meeting, Brussels, 17 May.

European Commission (2002), *Water Management in Developing Countries Policy and Priorities for EU Development Cooperation*, Communication from the Commission to the Council and the European Parliament, COM (2002) 132 final, 12 March, Brussels, retrieved from https://ec.europa.eu/europeaid/sites/devco/files/communication-water-management-com2002132-20020312_en.pdf.

European Commission (2003), *Water for life: EU water initiative: international cooperation - from knowledge to action*, Publications Office of the European Union, Luxembourg.

European Commission (2008), *Water – our health. The Policies of the European Union in the field of Water and Sustainable Development*, Zaragoza International Exposition Brochure, June – September, retrieved from https://publications.europa.eu/en/publication-detail/-/publication/2998a4e6-6806-48b6-a1f2-3567a3eb83be.

FAO (2013), *The State of Food Insecurity in the World. The multiple dimensions of food security*, Rome.

Garrity, D. (2014), Evergreen Agriculture: rethinking modern farming, *SPORE - the Magazine for Agricultural and Rural Development in ACP Countries*, No.170, the Netherlands, June-July, p.12.

General Secretariat of the Council (2011), *The Africa-European Union Strategic Partnership. Meeting Current and Future Challenges together*, Publications Office of the European Union, Luxembourg.

Klimburg, A. (2012), *National Cyber Security Framework Manual*, NATO CCD COE Publication, Tallinn.

Meyer-Minnemann, L. (2016), Resilience and Alliance Security: The Warsaw Commitment to Enhance Resilience, in: Center for Transatlantic Relations, *Forward Resilience: Protecting Society in an Interconnected World,* retrieved from http://transatlanticrelations.org/topic/security-and-resilience/forward-resilience-protecting-society-interconnected-world/

NATO Review (2016), *Resilience: a core element of collective defence*, retrieved from http://www.nato.int/docu/Review/2016/Also-in-2016/nato-defence-cyber resilience/EN/index.htm.

NATO Website (2016), *Warsaw Summit Communiqué*, paragraphs 4 and 73, retrieved from http://www.nato.int/cps/en/natohq/official_texts_133169.htm.

Shabd, A., Benjamin, D. and Guha-Khasnobis B. (2007), *Food Security: Indicators, Measurement, and the Impact of Trade Openness*, Oxford University Press.

Sjursen, H. (2012), *The EU's Common Foreign and Security Policy. The Quest for Democracy*, London: Routledge.

Smith, M. (2004), *Europe's Foreign and Security Policy. The institutionalization of cooperation*, Cambridge University Press, Cambridge.

Sumner, A. and Lawo, T. (2013), *The post-2015 Development Agenda: A review of the debate and potential elements of a joint EU strategy*, EADI Policy Paper Series, Bonn, February, retrieved from https://www.eadi.org/typo3/fileadmin/Documents/Publications/EADI_Policy_Paper/Sumner-Lawo_EADI_Policy_Paper_-_The_Post-2015_Development_Agenda__February_2013__small.pdf.

Tekin, F. (2012), *Differentiated Integration at Work. The Institutionalisation and Implementation of Opt-Outs from European Integration in the Area of Freedom, Security and Justice*, 6, Nomos, Baden Baden, Germany.

Telò, M. (2014), *Globalisation, Multilateralism, Europe. Towards a Better Global Governance*, Ashgate Publishing, UK.

The Royal Society (2011), *Knowledge, Network and Nations: Global scientific collaboration in the 21st century*, Policy Document, UK, retrieved from https://www.snowballmetrics.com/wp-content/uploads/4294976134.pdf.

Wiggins, S. and Slater, R. (2010), Food Security, in: Burgess P. (eds.), *The Routledge Handbook of New Security Studies,* London: Routledge, pp.132-143.

Wilkinson, R. and Hulme, D. (2012), *The Millennium Development Goals and Beyond. Global Development after 2015*, London: Routledge.

World Bank (2013), *Atlas of global development. A visual guide to the world's greatest challenges*, Fourth Edition, Harper Collins Publishers, Washington D.C.

Appendix I

Definitions

- **Food access** – "refers to the ability to obtain an appropriate and nutritious diet and is in particular linked to resources at the household level" (Shabd *et al.*, 2007, p.65);

- **Food availability** – "refers to the physical presence of food at various levels from household to national level, be it from own production or through markets" (Shabd *et al.*, 2007, p.62);

- **Food utilization** – "concerns here include the way in which food is distributed within the household between individual members, the preparation of food, and the health of those eating" (Wiggins and Slater, 2010, p.133);

- **International poverty lines** – "lines such as $1.25 and $2 a day" (Sumner and Lawo, 2013, p.5)

- **Low-income economies** – "those with a gross national income (GNI) per capita of $1.025 or less in 2011" (World Bank, 2013, p.139);

- **Middle-income economies** – "those with a gross national income (GNI) per capita of $1.026 or more but less than $12.476 in 2011" (World Bank, 2013, p.139);

- **Poverty** – "defined not simply by the absence of income and financial resources, but also as encompassing the notion of vulnerability and such factors as access to adequate food supplies, education and health, natural resources and drinking water, land, employment and credit, information and political involvement, services and infrastructure" (European Commission, 2002, p.9);

- **Water management** – "cross-sectoral issue to be mainstreamed within development policies associated with poverty reduction" (European Commission, 2002, p.9);

- **Water source, access to an improved** – "the share of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, or rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person per day from a source within one kilometer of the dwelling" (World Bank, 2013, p.141).

Appendix II

Table 1. Proportion of global poverty, and poverty incidence in LICs and LDCs, $1.25 and $2, 2008

	$1,25 poverty line			$2 poverty line		
	Millions of people	% world`s poor	% poverty incidence	Millions of people	% world`s poor	% poverty incidence
Low Income Countries	316.7	25.7	48.5	486.3	20.6	74.4
Middle-income countries	917.1	74.3	19.5	1,871.1	79.4	39.7
LMICs	711.6	57.7	30.2	1,394.5	59.2	59.1
UMICs	205.5	16.7	8.7	476.6	20.2	20.3
China and India	599.0	48.6	24.3	1,219.5	51.7	53.8
Least Developed Countries	317.8	25.8	46.1	497.2	21.1	72.1
Total world poverty	1,233.8	100.0	22.8	2,357.2	100.0	43.6

Source: Sumner and Lawo, 2013, p.12

Table 2. Distribution of world poverty by low and middle income and fragile States combinations, 2008

	LICs	MICs	Totals
% world poverty	18.4	13.9	32.3
Fragile States	7.3	60.4	67.7
Non-Fragile States	25.7	74.3	100.0
Poor (millions)	226.8	172.1	398.9
Fragile States	89.9	745.0	834.9
Non-Fragile States	316.7	917.1	1,233.8

Source: Sumner and Lawo, 2013, p.13

Table 3. Global MDGs in Progress

MDG	Improvement since 1990	Distance progressed to Goal (100% = Goal attained)	On track?	Faster Progress 2003-2008 compared to 1990-2001/2
Poverty	Y	80	Y	Y
Undernourishment	Y	77	N	N
Drinking water	Y	88	Y	N

Source: Sumner and Lawo, 2013, p.6

Appendix III

Agreed baseline requirements

---

1. Continuity of Government – maintaining at all times the ability to make decisions, communicate them, and enforce them, and to provide essential government services to the population.

2. Resilient Energy Supplies – ensuring that energy supply, including national power grids, are secure and that nations maintain the necessary prioritization arrangements and redundancy.

3. Resilient Civil Communications Services – ensuring that telecommunications and cyber networks remain functional even in demanding conditions and under attacks.

4. Resilient Food and Water Supply – ensuring sufficient supplies are available to both civilians and the military, and safe from disruption of sabotage.

5. Ability to Deal with Large Scale Population Movements – to be able to de-conflict such movements from potential national or Alliance military deployments and other requirements.

6. Ability to Deal with Mass Casualties – ensuring that health systems can cope even in very demanding situations when there might be simultaneous pressure on civilian and military health care capabilities.

7. Resilient Civilian Transportation Systems – ensuring that NATO forces can move across Alliance territory rapidly and that civilian transportation networks remain functional and effective to support civil and military requirements even when challenged or attacked.

Source: Meyer-Minnemann, Center for Transatlantic Relations website