

A New Deal for Refugees: How Land Restoration and Infrastructure Modernization Can Help Solve the Refugee Crisis

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Abstract

The migrant crisis in Europe is the largest since WWII. Millions of refugees are without a source of income and devoid of hope. However, this tragedy could present an opportunity for Europe. The EU currently faces two problems: firstly, decaying, outdated European infrastructure and construction; and secondly, the abandonment of European farmland. A large influx of labor has the potential to solve these issues. During the 1930s, the Civilian Conservation Corps (CCC), a U.S. government program from the Great Depression, employed large numbers of men in land management fields. Just as the CCC addressed the environmental and social problems of its day, a modern program modeled after the CCC could address the issues currently facing the EU. This paper outlines how the EU could employ refugees to tackle environmental issues in Europe. The paper also explores potential uses for abandoned farmland, such as re-utilization for agriculture, agroforestry, and re-wilding as well as the management, funding, and potential issues by such a program.

Keywords: work-relief, refugee, agricultural-abandonment, CO₂ emissions, agroforestry, re-wilding, infrastructure-modernization.

Author's Note:

My profound desire to contribute something beneficial to the field of sustainable development (more than just liking a feel-good video on Facebook) was the motivation behind this paper. However, my motivation for entering the fields of environmental science and political science as a whole is due to the fact that I had a fairly privileged upbringing. Therefore, my desire to participate in the field of sustainable development traces back to my wish to try to give others the chance I had by increasing intergenerational equity. I have always had an interest in history and as such see many similarities between the current European refugee crisis and the American

Depression of the 1930's. Under FDR, the disaster was turned into an opportunity to improve the American landscape via the Civilian Conservation Corps. In turn, the CCC helped spawn the American environmentalist movement. My thesis is that a government work program modeled after the CCC can give refugees in Europe livelihoods while also addressing a multitude of environmental issues. Currently, it helps address multiple issues facing the EU (and world), and as a result, increases equity for current and future generations. It advocates for such sustainable development solutions as agroforestry, re-wilding, and modernization of existing buildings and infrastructure. Future avenues of research could consist of analyzing the feasibility of other forms of refugee work relief that address sustainability issues. In an era of projected mass displacement and climate refugees, programs such as this may become frighteningly useful and necessary.

Introduction

Today's refugee crisis represents the largest movement of displaced people in Europe since WWII. The Great Depression saw some 13 to 15 million Americans without livelihoods. To rectify this, Franklin Delano Roosevelt's administration implemented the New Deal to revitalize the economy and curb unemployment. One of his most successful programs was the Civilian Conservation Corps (CCC), a program that put millions of men to work. This paper proposes a New-Deal-style scheme modeled after the CCC to take advantage of the influx of unemployed refugees by hiring them to work in fields that support the EU's local economies and facilitate the implementation of EU-wide sustainability goals. These might include maintaining local agriculture, reducing carbon emissions, and re-wilding, as well as conserving wild lands. The program would also help integrate refugee populations into European societies. Potential fields of employment include agriculture, forestry, and ecology/conservation in response to European farmland abandonment, as well as updating energy-inefficient buildings and outdated power grids.

What is the CCC?

During the Great Depression, American president Franklin Delano Roosevelt created the CCC, a work program, as part of his New Deal. The program gave livelihood to unemployed men with the goal as stated by Roosevelt; of having them work on "forestry, the prevention of soil erosion, flood control, and similar projects" (as cited in Bass, 2013). The program was a tremendous success. Within three months of introducing the Civilian Conservation Corps, 275,000 men were working on conservation projects (Bass, 2013)(or for comparison one-fifth of the 1.3 million applicants who applied for asylum to the EU in 2015) (Connor, 2016). At its peak, the CCC enrolled 500,000 men each year, with a total of three million men working to conserve the environment and create infrastructure from 1933-1942. In 1937 alone, the CCC "planted 365,233,500 trees, built 1,081,931 dams, and laid 9,960 miles of telephone lines" (Bass, 2013). Additionally, the CCC "slowed erosion on forty million acres of farm land, developed eight hundred new state parks, constructed 10,000 small reservoirs, and stocked America's rivers with 1 million fish"

(Bass, 2013). Conservative estimates are that the CCC worked more than 118,000,000 acres of land (Maher, 2002)– an area larger than Poland. Parallels can be drawn between the Great Depression and the current European refugee crisis, as both involve millions of people in poor circumstances seeking work and opportunity. Thus, a European agency modeled after the CCC would be a salient solution today.

Important differences between this proposal and the CCC are the socioeconomic as well as environmental circumstances that each program was designed around. The EU is in much a preferable socioeconomic (and in regards to agricultural land) environmental position than America was during the 1930's. While the CCC was founded as a way to relieve the pressure that millions of out of work young men were applying to the fabric of American society. Clearly the EU and its populace are not in anywhere near as dire condition. Additionally, the CCC was also deployed in part to counter the effects of the Dustbowl (Anonymous, 2010). A set of climatic and man made conditions that rendered vast tracts of farmland in the Great Plains region agriculturally untenable, due to high levels of erosion (PBS, n.d.). However, while the EU is in state of greater stability than the society that created the original CCC. The same pressures exist in the form of at risk populations (refugees) and declining agricultural productivity (the projected abandonment of European farmland). As such, a society does not need to be in a state as degraded as America was in during the great depression to reap the benefits from a program designed and implemented during that time.

Despite the historical parallels between the current refugee crisis and the Great Depression, it is reasonable to doubt whether an American government program implemented in the 1930s is suitable for the economic environment of modern Europe. The CCC could employ people in great numbers because there was readily available land to improve and a high domestic demand for new infrastructure. However, it is not only the nature of population movements into Europe that mirrors the economic migrations of the 1930s. The current economic viability of European agricultural land and the need for public sector intervention in infrastructure development also mirrors America in the 1930s. In America, agriculture in the Great Plains region became commercially untenable due to high rates of erosion caused by a combination of unsustainable farming practices and decreased rainfall (PBS, n.d.). This in turn caused a marked

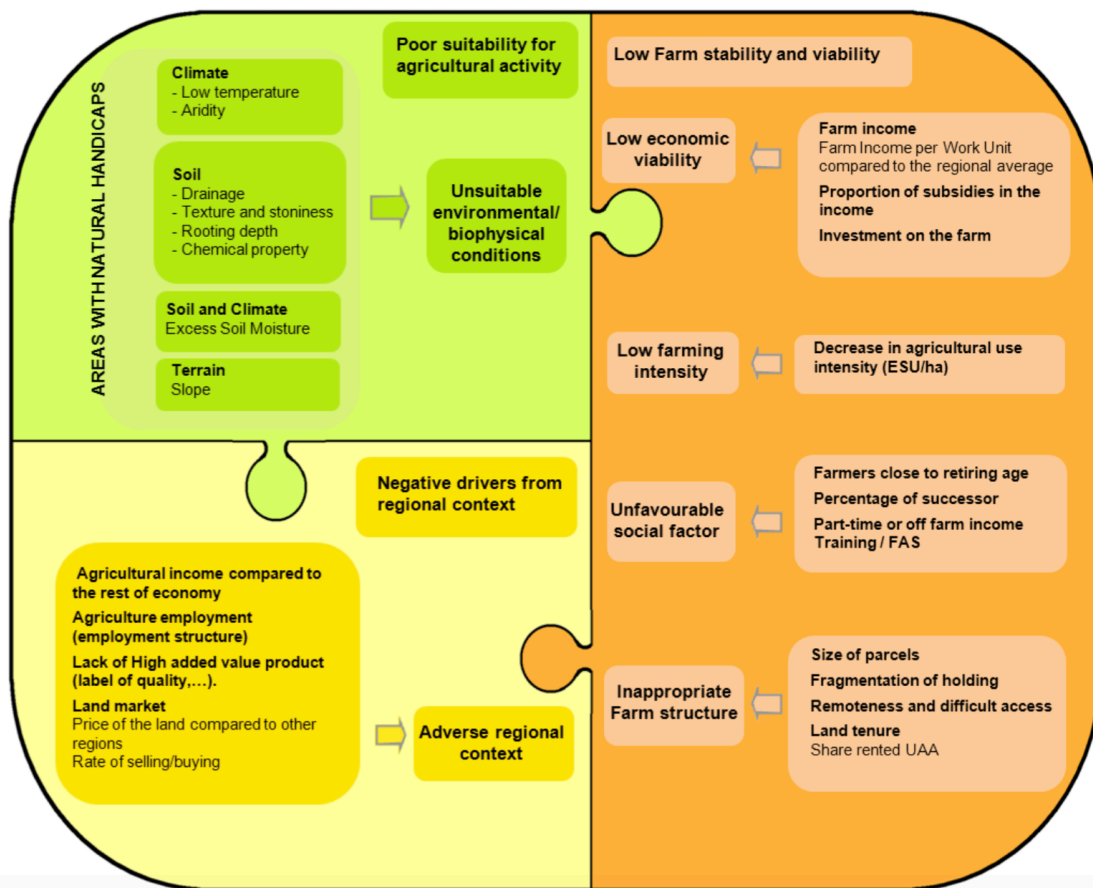
decrease in commercial viability of agricultural land, and a collapse in the agricultural economy of the region (PBS, n.d.). Part of the CCC's mandate was to address this worsening economic situation via land restoration specifically in the field of soil erosion (Bass, 2013). The state of EU agriculture mirrors that of the Great Depression, as future large-scale farmland abandonment is projected to cause a loss in agricultural production throughout the EU (Terres, Nisini Scacchiafichi, & Anguiano, 2013). Another aspect of the CCC's mandate was to build infrastructure in areas that needed repair or lacked the relevant infrastructure to begin with (Bass, 2013). Currently in the EU, there are discrepancies between the quality of infrastructure in various regions. Additionally, there is the requirement to modernize infrastructure across the region in order to reduce the EU's carbon footprint. Thus, although the modern EU is far more developed than the US in the 1930's, there is copious demand for expenditures and labor in the renovation and construction of infrastructure and farmland.

Who Would this Program Benefit?

Much like the CCC, the proposed program outlined in this paper would seek to address the needs of at-risk populations by providing work relief. An important point is to address specifically which populations would be eligible to participate. Thus it is important to differentiate between refugees and migrants when defining this program. On its website, the UNHCR defines refugees as those for whom "it is too dangerous ... to return home" and for "whom denial of asylum has potentially deadly consequences" (Edwards, 2016). Migrants "choose to move not because of direct threat of persecution or death, but mainly to improve their lives by finding work or in some cases for education, family reunion or other reasons" (Edwards, 2016). In Europe, we currently see a mix of both, some fleeing from areas where there is a real mortal risk, while others arrive seeking economic opportunity (Edwards, 2016). The program proposed here would initially seek to hire refugees already in Europe. If it proves viable and is a success, it could be extended to migrants seeking economic opportunity. However, as there were more than 1.3 million applications for asylum in 2015 (Conner, 2016), for the foreseeable future it would be best to focus on refugees rather than migrants, as the former are most in need.

Farmland Abandonment and Arising Opportunities

According to estimates by the Institute for European Environmental Policy, by 2030 between 126,000km² and 168,000km² of farmland will be abandoned (Keenleyside & Tucker, 2010). Reasons include: "low economic viability (farm income per work unit being lower than regional average), inappropriate farm structuring (size of parcels, remoteness, and fragmentation of holding), unfavorable social factors (greying farming populations), a weak land market, and unsuitable environmental factors (climate, soil, terrain)" (Terres et al., 2013).



(Terres et al., 2013)

This means that, even by conservative estimates, an area larger than Hungary will fall out of agricultural use within the next 14 years. History has shown, however, that new land means new opportunity. A stream of able bodies and minds entering Europe and seeking employment creates new options. A work program modeled after the CCC, updated for the modern era, would have tremendous potential to successfully pair unemployed refugees with

jobs that arise out of the current trend in land abandonment. This section of the paper examines job opportunities which would emerge for refugees if the conservative figure of 126,000km² of land is abandoned by 2030, and if that land, for example, was utilized for afforestation, agriculture, and rewilding /ecological restoration.

Afforestation

Timber production via afforestation (adding forest to previously unforested land) is a common instrument in the environmentalist toolkit. By conservative estimates, 126,000km² (31,135,278 acres) of land will open up in the next 14 years (Keenleyside and Tucker, 2010). In Canada, a country with a prodigious afforestation program, typically 2,500 seedlings per hectare are planted (1,012 seedlings per acre) (Duinker, personal communication, 2016). A well-trained tree planter can plant 2,500 seedlings per hectare every 10-hour workday (Duinker, personal communication, 2016). If one third of the future abandoned 126,000km² of land were devoted to afforestation, 4,200,000 hectares would need to be planted. This implies that between now and 2030, 42,000,000 paying work hours could be created for refugee workers seeking a start in Europe. Tree planting would be beneficial for refugees in the short term; however, it could be problematic in the long run. Workers are paid for each tree planted. While it takes experience to learn how to efficiently plant trees, the concept of tree planting is fundamentally simple, and would be classified as unskilled labor. It would not be difficult for a physically fit new arrival to pick up the concept, but it is unlikely that it could support a long-term career. Additionally, tree planting is extremely physically demanding, and would be suitable only for refugees able to safely handle the workload. That said, the journey to Europe is arduous; many refugees able to make the trip are likely fit enough to engage in this work. Further, planting is seasonal work, as seedlings must be planted at a certain time of the year (Elias, 2009). But while the work is physically demanding and temporary, it can be financially lucrative. In Canada, during a traditional tree planting season of two months, a novice tree planter typically earns between 1,373 and 4,806 euros (Elias, 2009). Experienced employees generally earn between 3,089 and 6,179 euros during the same period (Elias, 2009). So, tree planting could provide physically fit refugees with an opportunity to earn significant money within a short two-month span, better

equipping them to start a life in Europe and pay for critical expenses such as housing and education, while giving them work they can take pride in.

A CCC-styled program that employs refugees for timber production could do so in two different ways. One is the traditional socialist New Deal method of the CCC, in which the government pays workers directly from its budget. With this approach, the EU funds refugees to start their lives in Europe while obtaining multi-dimensional services in return. One example is carbon sequestration, as one mature tree sequesters an average of 48 pounds of carbon each year. If one-third of the minimum of projected abandoned farmland is forested, it could remove 504 billion pounds of carbon per year (American Forests, n.d.). That is more than 5 times the amount of CO₂ that Hungary produced in 2011 (United Nations Statistics Division, 2015). Growing timber resources would also allow the EU to reduce foreign timber imports, lowering its carbon footprint.

Another way of funding an afforestation program would be to partner with private industry. While this is not a traditional strategy, there is no reason why a modern land work and restoration program should be mired in the past. Companies could be encouraged to pay for a planter's wages by being given rights to harvest timber resources when the trees reach maturity. The program in this case would function as a brokerage house, pairing refugees seeking work with companies looking to invest in natural capital. The EU could ensure that these trees are harvested sustainably, perhaps training some longer-term refugee employees for the job, as well as training native EU citizens. Scalability is another benefit of this strategy. Trees need not be planted millions at a time. Work could start with small test groups of a few thousand working hours of tree planting, in parts of Europe where the demand for forests and timber resources is the highest. If successful, the process could be augmented to encompass more hectares and working hours, while modifying the program based on feedback from the smaller initial trials.

Agriculture

Agriculture is another option that could be incorporated into a program to improve land. While it may seem counterintuitive to re-farm land that is being abandoned due to economic globalization of

the farming industry, it is important to remember that the motivations behind abandonment are not just economic and environmental. Inappropriate farm structuring (size of parcels, remoteness, and fragmentation of holding) and unfavorable social factors (greying farming populations) are both non-economic factors contributing to farm abandonment (Terres et al., 2013). At least 30% of the farming populations of Spain, Romania, Portugal, Lithuania, Bulgaria, Italy, and Greece are aged older than 65 (Terres et al., 2013). In Portugal, Romania, Lithuania, and most of Bulgaria and Italy, that number is 40% (Terres et al., 2013). The EU states that one of the goals of its Common Agricultural Program (CAP) is to “maintain its agricultural production potential in all areas to avoid becoming over-dependent on food imports” (European Commission, 2016). Additionally, according to the EU’s own estimates, global food demand will increase by 50% by 2030, bringing its own complications (European Commission, 2016). If the EU wants to maintain its agricultural production and import less food, it will need more farmers. Refugees could fill this void. Before the current conflict, Syria was the only country in the region that was self-sufficient in food production, and was a net exporter of many food crops to the gulf region (Carnegie Endowment for International Peace, 2015). Forty percent of Syrian livelihoods were connected to agriculture (Carnegie Endowment for International Peace, 2015). The EU, with its ageing farming population, should view this as an opportunity. A CCC-styled program could work to place refugees with farming experience in areas of Europe currently experiencing farm abandonment and with greying agricultural populations. This would both give skilled refugees a familiar livelihood and boost local economies. Over time, refugees might buy farms and fully integrate themselves into European society.

Agriculture also presents an opportunity for carbon sequestration through biochar, a technique that stores as charcoal the organic carbon collected via photosynthesis that would otherwise decompose back into the atmosphere (Tenebaum, 2009). Storing roughly 40% of the original carbon in the soil, biochar “helps promote the growth of beneficial microbes, and helps retain phosphorus and potassium in soils”(Tenebaum, 2009). In fact, “[b]iochar paired with traditional chemical fertilizers increased the growth of winter wheat and several vegetables by 25%-50%” (Tenebaum, 2009). Through a CCC-style program, the EU could pay refugees to collect European biowaste and convert it to biochar.

Such a program would help the EU meet the Paris Accords climate goals by offsetting fossil fuel emissions, in addition to employing refugees and helping the EU deal with food waste (this technique is best used with agricultural waste), all while increasing crop yields. Beyond biochar, domestic European agriculture offers other opportunities to mitigate CO₂ emissions. For instance, 30% of CAP payments are utilized by farmers to practice environmental sustainable methods of farming (European Commission, 2017). European agriculture has also seen a 24% decrease in Carbon emissions since 1990 (European Commission, 2017). By promoting and sourcing local agriculture via a CCC-style program, and relying less on outsourced agriculture the EU may be able to lower its total CO₂ output. The low carbon efficiency of EU production is supported by data showing that non-EU states, “use more carbon-intensive production technologies” (Eurostat, 2016a), because they may not have as many environmental protections, or use less sustainable practices. Further benefits include increased quality assurance of both agricultural methods and the final product (Blanke & Burdick, 2005). By keeping agriculture within EU boundaries, the entire agricultural supply chain is accessible to European quality assurance standards such as EurepGAP, increasing product traceability (Blanke & Burdick, 2005). Proximity to domestic agriculture also increases the value of property and fosters a sense of community empowerment (Mok et al., 2014).

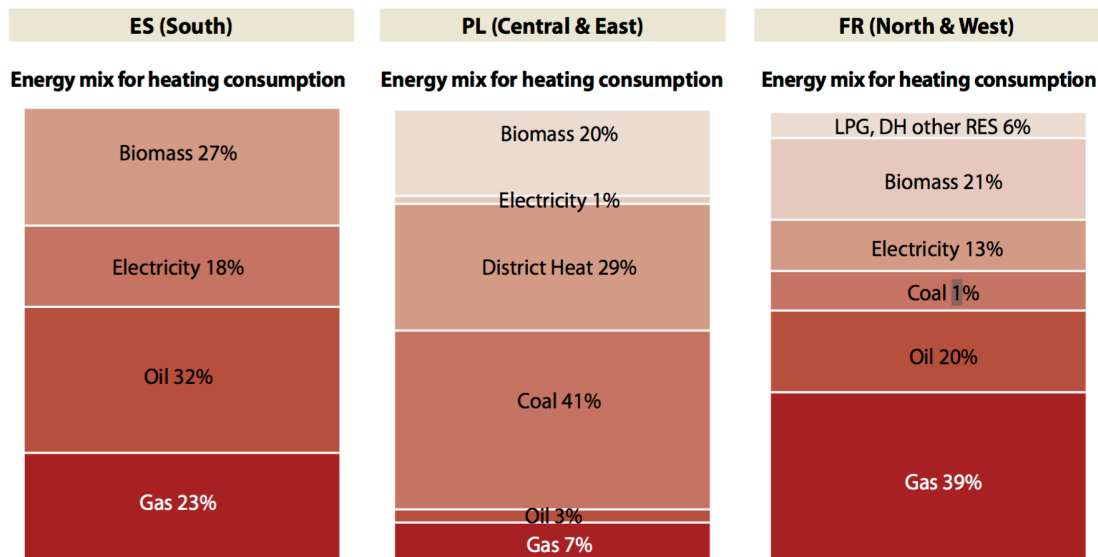
Rewilding

Rewilding and ecological restoration is another area that could benefit from a boom in refugee labor. Rewilding is the promotion of wild species and natural systems, or the development of wilderness, in a region (Rewilding Europe, 2015). Here, the CCC model could be applied without much modification. Allowing abandoned agricultural land to revert to wilderness would create hiring opportunities for refugees. Tree planting work might be offered. Additional jobs created by a rewilding program would include trail creation, restocking rivers and lakes with fish, restocking forests with game, and connecting areas of new wilderness via wildlife corridors (spaces that act as a connection between two separated areas of wildlife habitat, allowing for the movement of species, and a subsequent reduction of negative isolation caused effects on species and ecosystems) (Bond, 2003). However, these are just primary jobs. Economic opportunities created by new

wilderness areas include businesses that cater to hunting, fishing, hiking, conservation, and ecotourism “environmentally responsible travel to natural areas, in order to enjoy and appreciate nature” (The Nature Conservancy, n.d.). Secondary industries generated from the labor of a CCC-styled program would need employees, and who better to hire than those who recreated the wilderness? Additionally, the EU will need skilled rangers and ecologists to monitor the health of these new wildernesses. Again, refugees who worked on rewilding would be an obvious choice.

Employing Refugees through Updating Infrastructure

The EU has set goals to have 27% of its energy powered by renewables by 2030, and to cut greenhouse gases by at least 40% (European Commission, 2010). As part of this CCC-structured program, crews of refugees with appropriate experience (or suitable training) could work on updating Europe’s infrastructure to meet these goals. ‘Greening’ buildings and applying insulation might be a potential area of work for these crews. Currently, more than 40% of residential buildings in the EU were built before the 1960s (Marina Economidou et al., 2011). Additionally, 24.8% of the EU’s energy consumption is from household use (Eurostat, 2016b). The extent of the problem becomes clearer when one examines what energy these homes consume: Southern Europe derives 32% of its residential heating energy from oil and 23% from gas, Central and Eastern Europe produce 41% of their residential heating energy from coal, and Western Europe generates 30% of its residential heating energy from oil and 39% from gas.



(Marina Economidou et al., 2011)

With the EU aiming to decrease energy usage by 27%, this area needs to be addressed (European Commission, 2010).

This program could identify refugees with construction skills and train them in energy-efficient methods, and then pay these refugees to update the buildings of Europe. This could be accomplished in a few ways. For those in a higher income bracket, regulations might require that a home be brought up to a more efficient standard; these residents could pay to have their homes updated, perhaps in installments. In the long run, this would benefit the residents, as they would save money on energy costs. A different strategy would be to have the EU cover the initial cost of the renovation, and have the client pay back the cost over time, with money saved through reduced energy expenses. This method could potentially create accounting jobs to calculate how much energy would be saved and to work out payment plans. Finally, a third way this could be implemented would be to partner with private industry and utilize the program as a brokering house for labor. Tax incentives and subsidies could encourage consumers to hire private firms employing refugees to renovate old houses and improve the EU's energy efficiency. Updating buildings would require a wide range of skills and experience, including plumbers, roofers, electricians, carpenters, accountants, and city planners, offering opportunity to refugees of various backgrounds. Starting with government and public buildings that are out of date could test the feasibility of this program.

A potential argument opposing the proposed program is that it would take jobs from native EU citizens. However, the vast and varied labor necessary can accommodate both refugees and native EU citizens. Residential housing is one example of a sector requiring labor-intensive retrofits to increase sustainability. While residential housing does not fall within the textbook definition of infrastructure, there is no question that suitable housing is required in order for a society to function. Currently, the estimated rate of residential energy efficiency renovations is 250million m² annually, or 1% of all EU residential floor space (Artola, Rademackers, Williams, & Yearwood, 2016). While 40% of EU residential buildings predate the 1960's (Marina Economidou et al., 2011). If, for instance, all buildings from before 1960 must be renovated within 10 years to lower their carbon footprints, 10 billion m² of floor space will need to be renovated. To meet this goal, a four-fold increase in the number of yearly renovations would be required. To meet this increased renovation rate, it follows that a four-fold increase in individuals employed in residential renovations would be required. Furthermore, commercial and industrial infrastructures will require energy efficiency retrofits. Thus, building renovations can provide ample employment opportunities for both EU citizens and refugees.

Electrical grids are another sector that could employ refugees towards lowering the EU's carbon footprint. Transitioning Europe's electrical system to a Smart Grid, an electrical system incorporating digital monitoring technology as well as integrated storage capacity, would increase efficiency and compensate for the intermittent nature of renewables (Anonymous, 2009). Refugees could be employed to install necessary hardware, such as advanced electrical metering devices, smart appliances, decentralized electrical storage capacity in buildings, and larger community scale electrical storage (Romer, Reichhart, Kranz, & Picot, 2012).

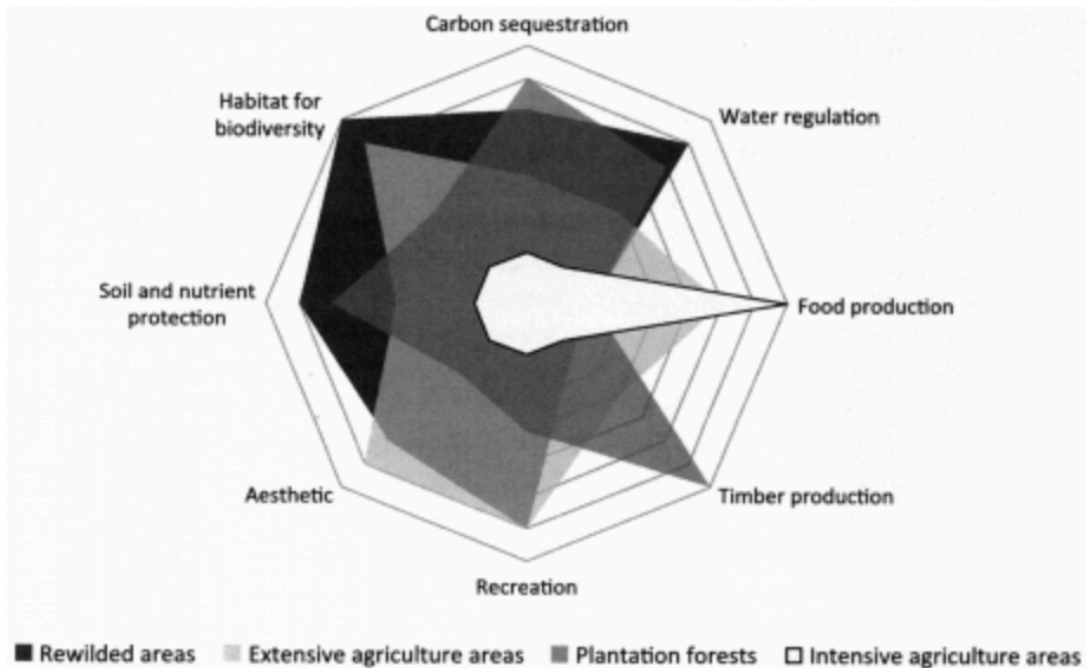
This potential industry is a very promising opportunity to employ refugees, as it is estimated that it would require 51 billion Euros to make the transition to a smart grid (Faruqui, Harris, & Hledik, 2010). Thus potential funding for refugee employment would be available.

Other areas of interest include the power grids of countries bordering eastern Germany, which need upgrading; not necessarily to a smart grid, but merely to keep up with current demands. With the surge in Germany's wind capacity, Germany has been forced to dump excess

electricity from extremely windy days into neighboring countries, as it lacks the capacity to absorb and utilize it (Czech Power Transmission System ČEPS, 2015). Countries such as the Czech Republic and Poland claim that that spillover from Germany overtaxes their power systems and risks infrastructure damage. Poland partly blames difficulties caused by excess power surges from wind for a brownout (a brownout is a period of reduced voltage and electricity availability in a grid) (Merriam-Webster, n.d.) that it experienced in 2015. Surplus power flow having overtaxed the system so that emergency power could not flow to alleviate increased power requirements during a heat wave that year (Polskie Sieci Elektroenergetyczne S.A., 2015). Refugees with appropriate skills could be hired and trained to modernize the power grids of these countries, not only providing refugees with a viable source of income, but also helping to lessen the inequalities between European regions.

Scalability and Flexibility

Additional benefits of a CCC-styled program include flexibility and scalability. This paper splits abandoned farmland into equal thirds for agriculture, afforestation, and rewilding, but this arbitrary division is solely for the purpose of argument. In reality, a more accurate model for land utilization will depend on local demand by EU member states. Perhaps, due to a greying farming populace, Lithuania will want the program's local branch devoted to agriculture. Germany may want to embark on forest growth in order to soak up as much carbon as possible and create timber for new housing projects. Sweden may seek to expand its already extensive ecotourism industry by returning more land to a natural state (Visit Sweden, n.d.). What is best in one area may not (and likely will not) be best in another; a CCC-styled program can adapt to local needs.



(Navarro & Pereira, 2015)

A graphic showing the various benefits and downsides to different usages of land

Flexibility is not only an asset in relation to the differing geographic requirements. It also serves as an important attribute to employ as many refugees as possible from differing backgrounds. Infrastructure and land improvement jobs, which require skilled workers (e.g. - architecture, civil planning, accounting, conservation, ecology) would find a large labor market; a majority of the Syrian refugees currently in Europe are from urban, educated backgrounds, as they had the funds and resources to escape Syria (Tharoor, 2016). Blue-collar work (construction, plumbing, electrical work, carpentry, environmentally sustainable farming) could employ those refugees who have the necessary skills or can be trained quickly. Unskilled work (from tree planting, biochar collection or trail construction) could provide transitional relief for those who do not fall into the previous categories.

Scalability is another virtue of a CCC-style plan. The work need not start with millions-strong armies of tree-planters and infrastructure retrofitters. Minor projects could test the validity and viability of various programs, and work out issues. Initially, small crews can be trained to revitalize infrastructure in the most problematic areas. Small groups of refugees with agricultural backgrounds could be settled in EU areas that are most at risk of losing their farming populations. Test initiatives could be run with

private industry investment in timber resources planted by refugees. These projects can be expanded as they prove to be viable. In fact, because the plots of land being abandoned are both geographically and temporally dispersed, flexibility and scalability must be inherent in the methodology of the proposed program.

Integration

Be it agriculture, forestry, or rewilding, one of the greatest benefits to a program that involves close work with the land would be integration- having new arrivals out in the country improving land, building, and growing the future with their own hands. This work would invest new arrivals in the land and thus in the EU and its member states. Historical precedent can again be found in the original CCC. Testimonials from former CCC members such as Harry Dallas show the effect that the work of land restoration can have: “There was pride in the work. We built something, and I knew I helped, and saw the result. It was something you could take pride in, and there wasn’t lot of pride available in those days” (as cited in Bass, 2013). Enrollee Virgil McClanahan echoes this sentiment: “It was in this country my health was renewed” (as cited in Maher, 2002). This spirit of renewal would be immensely beneficial to those fleeing war-ravaged areas. After so much destruction, helping a country grow before one's eyes would be good for the psyche and soul (depending on your preference or personal belief).

While the proposed program would help foster an attachment to and invested interest in the lands of the EU, a potential critique is that working in a rural environment is a double-edged sword. While the work would foster attachment to the landscape, a lack of population density and the potentially conservative mindset of the rural populace could make refugee integration problematic. A counter-argument to this is that the proposed program is very versatile; one obstacle will not affect all components of the program similarly. First, not all the work available to refugees will be in rural areas. Much work on infrastructure improvement and modernization will be done in urban areas, where refugees will be able to live and interact with the general populace on a more regular basis. Another factor is time; work such as tree planting is seasonal and would only see refugees working in rural environments for two months of the year. As it is short-term, concerns about lack of integration should be minimal.

For refugees working long-term in rural communities (whether as a supplement to ageing agricultural populations or to improve the infrastructure of rural communities), additional steps should be taken to promote integration. Perhaps a combination of employees running the program, and veterans of the program could address issues with integration into local communities. In meetings, employees could work with local communities to highlight the benefits that refugees can bring to the community, as well as find ways to integrate refugees into the communities during their working time and beyond. This could involve, for example, promoting participation in local societies and clubs. Engagement with local communities could also be fostered in urban environments to address the issue of refugee labor segregation. Branches of the program could partner with civil society groups and local governments to promote the socialization of refugees within the local populace. This could be an added benefit for refugees working with the program.

Another way that the proposed initiative could facilitate integration would be to have classes on EU society. Precedent for this approach exists in the original CCC, which had as part of its mission an educational goal of fostering “employability and citizenship” in its members (Bass, 2013). The effectiveness of this education is reflected in the testimonial of a former CCC member, Kenneth Stephans: “Above all, I know what the word Americanism means” (as cited in Maher, 2002). To emulate this success, a component of the proposed refugee work program might include education on language and EU society/culture (e.g. - “What the word Europeanism means”). This could provide an added incentive for refugees to participate, as it would allow them to learn more about the EU and be able to integrate with greater ease. Additionally, it is crucial that any EU educational components of the program be supported by the socialization efforts of local citizens (perhaps via civil society initiatives), as well as efforts to encourage sensitivity to the cultures and situations of refugees.

There are other integration problems this program may face. Economically, it makes sense to offer refugees work in areas in need of labor. It also makes sense to minimize budget impact by utilizing funds already available for multiple purposes. However, there is a belief among many in Europe that refugees will be a drain on host countries. This program can address these concerns by scaling to work with local economies and being flexible in the type of work done. The program can engage with local communities and show

how employing refugees will grow, rather than drain, their economies, perhaps in a town hall with government and public attendance. Additionally, much of the works would entail unskilled labor, a stop-gap to allow refugees to save funds to jumpstart a new life in Europe- work that many Europeans might not want or, in some cases, lack the numbers for (e.g. agriculture). Thus it is not only preparing refugees for European society that the integration component should focus on, but also helping European society acclimatize to Syrian refugees.

An issue that could be raised in regards to integrating large numbers of refugees would be a potential increase in environmental demands, and the subsequent enlarged ecological footprint of the EU. However, any increase in resource consumption of the EU due to the refugee population would be negligible, in comparison to the current resource consumption of the total EU population. Together the combined population of all EU member states is approximately 510 million (Eurostat, 2016), while the number of documented asylum applicants within the EU in 2015 was 1.3 million (Connor, 2016). This number remained relatively constant in 2016, with 1.2 million applications registering for asylum in the EU (Eurostat Press Office, 2016). Assuming an addition of 1.3 million applicants every year for 5 years to the EU population, the projected increase in population will be 1.3%. It is logical to assume the requisite increase in the ecological footprint would follow a similar projection. However, an influx of refugees could become ecologically problematic on a state-by-state basis if the population of refugees is not distributed more evenly.

When processing asylum applications, the EU follows protocols laid out in the Dublin regulation (UNHCR, 2008). The guiding principle is that individual states must address asylum claims, usually the state in which the asylum seeker first entered (UNHCR, 2008). However, this has created inequity, putting exceptional strain on border countries and countries of high interest for refugees (Moriconi & Bordignon, 2017). This has resulted in border controls in some member states that put at risk the free travel aspect of the Schengen accords, a central tenet of the EU (Moriconi & Bordignon, 2017). Due to this issue, support has been voiced for a pan-European refugee system, and some progress has been made in the form of the EBCGA (European Border & Coast Guard Agency) (Moriconi & Bordignon, 2017). The proposal in this paper would build upon this support with a pan-European refugee work relief

agency, which will create a more equitable distribution of refugees. It would seek to share the burden of care for refugees more equitably amongst member states, and beyond that seek to gain tangible benefits from hosting refugees.

The Literature and Expert Opinion

The focus on integration is an additional boon to this proposal, as it corrects for mistakes which have happened in past refugee aid and development schemes. The literature points out that these tend to have limited and conflicting achievements. “[A]s Barry Stein (1994) asked in a paper prepared for UNHCR, was its purpose to promote the settlement and eventual integration of refugee populations in countries of asylum? Or was its aim to ameliorate the situation of refugees, the host community and state, pending the day when those refugees returned to their country of origin?” (as cited in Crisp, 2001). The project proposed in this paper sets as a clear goal that education/integration is an essential part of the work program, with systems in place to facilitate refugee assimilation.

Additionally, a program that the literature calls a success (despite its critique of tandem refugee aid and development schemes) bears a striking resemblance to the one proposed in this paper. The Income Generating Project for Afghan Refugees (IGPAR) “provided 21 million person-days of employment between 1984 and 1994, more than three-quarters of which benefitted the refugee population” (Crisp, 2001). This was mainly reforestation, watershed management, irrigation, flood protection, road repair, and construction work (Crisp, 2001). The opportunities offered to refugees in the IGPAR bears a striking resemblance to that offered by this paper’s proposal (i.e. - timber production, agriculture, re-wilding, and infrastructure repair). Both programs offer labor-intensive work in fields of environmental management and infrastructure maintenance/construction.

Finally, the fact that this program is being proposed in the EU and not in a developing nation effectively rebuts the potential critique that refugee aid and development programs fail when target nations lack the resources to handle projects of this magnitude (Crisp, 2001). The literature notes a concern of donors: “that the refugee aid and development concept was being used as a means of mobilizing additional funds for some hard-pressed (and in many cases badly governed) states” (Crisp, 2001). Having the

governments of the EU run this program addresses both of these concerns, as the EU definitely has the resources and administrative framework necessary to handle such a project, as well as the credibility to address concerns that the funds might be squandered.

Specific resources include multiple budgetary allotments that the EU has already earmarked for related causes and issues. Currently, for 2015 to 2016, the EU has budgeted close to 10 billion EUR for the refugee crisis (European Commission, 2015). Between 2014 and 2020, the EU has pledged to spend upwards of 180 billion EUR to battle climate change and create green infrastructure (European Commission, 2013). In 2013, as part of the CAP, “direct aid to farmers and market-related expenditure amounted to just 30% of the budget” (European Commission, 2016). Between 2014-2020, 450 billion EUR was set aside to fund the EU cohesion policy; which addresses “regional disparities in economic performance and living standards” promotes growth in less developed regions of the EU” (European Commission, 2014). While there is funding available for these purposes, this paper proposes a more cost-effective method. The program would find refugees with the relevant skill sets (electricians, plumbers, construction workers, urban planners) and, after the appropriate language training, pay a wage above the level of current welfare payments to build green infrastructure in underdeveloped parts of the EU from the cohesion policy budget. Such development would lower the EU’s carbon emissions while allowing refugees to become more self-sufficient, providing for themselves and their families. It would foster a sense of pride while integrating them into the fabric of the EU. The same approach could be employed with the CAP budget for a subset that would hire refugees with an agricultural background in order to maintain a viable domestic farming industry. The climate change budget could fund tree planting, and various environmental budgets might cover rewilding. This approach would address multiple issues with funds already allocated from budgets meant to address only a single issue, streamlining allotments and potentially creating a budgetary surplus.

Consultations with refugee aid experts give further credence to this approach. In an interview, Paul Spiegel, former Deputy Director of the Division of Program Support and Management at UNHCR, identified another benefit of the program: “Refugees who are already in Europe should be profiled economically and paired with work that best suits their skills and the needs of the local economies of Europe. This would allow refugees to become less

dependent on welfare and would allow the local economies to grow. This would be especially helpful in areas experiencing ageing populations”(Spiegel, personal communication, 2016). This paper adopts this approach by offering a range of work that can be tailored to suit local environmental and economic needs.

Conclusion

This paper proposes the creation of a New-Deal-style work program to take advantage of the influx of refugees in need of employment by paying them to work and support the EU’s local economies. This would facilitate the implementation of such EU goals as maintaining agricultural market share, limiting inequality between regions of the EU, and cutting carbon emissions. Potential fields of employment include updating energy-inefficient buildings and outdated power grids, agriculture, forestry, and ecology/conservation in response to European farmland abandonment. This program would be implemented by hiring refugees in scalable crews, working closely with local communities to best address their needs. The program would also include an education component to integrate refugees into European society. Finding work for refugees would allow them to escape welfare and transition out of a victimized mindset through work in which they can take pride.

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