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Problem Statement

After a period of continuous economic growth, the global financial crisis affected the economies of almost all countries in the world, not excluding Greece. At the end of 2012, the size of the Greek economy had contracted by 17 percent in real terms compared to the beginning of the crisis, deeper than the rest of the southern European countries.

The financial crisis had a severe impact to Greece, which was transmitted to the society via three different channels, namely the Public Sector, the Labor Markets and the Financial Markets.

In particular, cuts in social spending and the simultaneous tax increases were parts of a fiscal adjustment policy that resulted in a slowdown of the economic activity. This effectively led to a decrease in demand for goods and services, negatively affecting the jobs and employment conditions. Additionally, the severe losses in private and corporate wealth reduced access to credit.

At the same time, funds for unemployment increased significantly (64 percent) in Greece, capturing the demand for relevant allowances. However, the unemployment rate in Greece rose from 2008 onwards, as the recession deepened. From 2010, it started to increase dramatically and reached 24.5 percent in 2012 in comparison to 10.4 percent of the EU-28.

The impact of the crisis on employment has been asymmetric in many respects. It appears that the crisis had a more significant impact on youth, driving the youth unemployment rate upwards at a faster pace than in the EU. In 2012, youth unemployment in Greece climbed at 44.7 percent, significantly higher than the 23 percent of the EU-28. The share of adults living in workless households had almost doubled in 2012 (~20 percent), compared to 2007.

The above dramatically affected household incomes, which contracted by more than 17 percent since the beginning of the crisis. During the same period, the income of the EU-27 households increased by approximately 5 percent. Lower income households appear to have lost more during the crisis compared to higher income households. In particular, the crisis led to a change in the pattern of real income adjustment at the bottom and at the top, with a gradual widening of the gap between the rich and the poor over the years.

Overall, more than 35 percent of the population was at risk of poverty or social exclusion compared to 28 percent during 2008.

Based on 2014 data, child poverty in Greece is reaching 26.9 percent, one of the highest among the countries of the developed world. The population of poor children is close to 521,000, with 363,000 of these of school age (between 6 and 17 years old). While the rate of children in the EU at risk of poverty or social exclusion remained relatively steady between 2008 and 2012, in Greece the respective rate surged to 35.4 percent in 2012.

Citation: Grants Against the Greek Crisis - Impact assessment study commissioned by the Stavros Niarchos Foundation and carried out by Deloitte - http://www.snf.org/media/3992835/Deloitte-Executive-Summary-EN.pdf
In the fall of 2013, the Stavros Niarchos Foundation announced a call to action to help create new opportunities for Greece’s younger generations, which are severely impacted by the country’s current alarming unemployment rate. Fully aware of the latest official measurement of August 2013 that showed the unemployment rate exceeding 60 percent, the Foundation has committed a long-term grant of 100 million Euro to help address the national problem to the degree possible.

To that end, the Foundation convened a conference in New York on April 3 and April 4, 2014, bringing together economists, policy makers, foundations, NGOs, government officials, entrepreneurs, and academics for the sole purpose of exploring enterprising initiatives that could potentially lead to job creation and growth and provide job opportunities.

“The situation is dire,” stated Andreas C. Dracopoulos, Co-President and Member of the Stavros Niarchos Foundation Board. “As labor economists have consistently pointed out, contrary to any other age group, being unemployed at a young age continues to impact people throughout most of their adult lives. We need to recharge the youth and create prospects now before a generation or several are lost.”

Leading to Long-Term Impact

Youth unemployment is critically high in Greece, but it is a serious problem that confronts most developed economies. In announcing this new initiative, the Stavros Niarchos Foundation aims not only to help the unemployed youth in Greece, but also to develop a paradigm, a forum and a debate on effective ways to address the issue on a much broader level. One such response is the development of the New Agriculture for a New Generation initiative.
OVERVIEW

Through the generous support of the Stavros Niarchos Foundation, Rutgers, The State University of New Jersey, in partnership with the Agricultural University of Athens (AUA) and the American Farm School (AFS), began planning an ambitious, multi-year project entitled *New Agriculture for a New Generation*. Through this planning grant, that addresses the Stavros Niarchos Foundation's Recharging the Youth initiative, expert faculty and leadership from the School of Environmental and Biological Sciences and the New Jersey Agricultural Experiment Station at Rutgers worked closely with executive leadership teams and faculty from the Greek partner institutions to provide the following deliverables:

• **Sixteen sectoral studies** that assess the current state of each sector and the attractiveness of specific fields for youth employment and entrepreneurship,

• **Two feasibility studies** focused on establishing food processing and sustainable farming incubator facilities and practices,

• **One e-commerce study** exploring the opportunities and challenges for start-up and existing enterprises in the food and agriculture sector (agrofood),

• **One study identifying young people as potential new farmers**, and

• The development of **two technology-based applications** designed to support data collection, community and industry development, agrotourism, and ongoing youth engagement.

*View the full versions of the studies and research of New Agriculture for a New Generation online at greece.rutgers.edu*
POTENTIAL FOR YOUTH IN AGRICULTURE

The potential to engage unemployed and under-employed young people in the food and agriculture sectors is central to this project. While we know that there are young farmers trained and currently active in Greek agriculture, there also are young people who have some training and interest in agrofoods and others who have no training but are interested in agriculture. Further, there are young people with experience and education in unrelated, but complementary fields, such as business management, graphic design, hospitality, and technology, to name a few, who can play an important role in agricultural enterprises.

The potential for young people to enter the workforce and make a positive impact on the economic crisis is clear. Existing farmers can expand and diversify their businesses while others can receive training and enter the field. Opportunities to engage youth with complementary skills can support growth in the agrofood sectors and strategically enable them to be attractive to the marketplace.

The potential is great. The implementation phase of the New Agriculture for a New Generation project will build upon the research, partnerships, and networks developed in the first phase and present the strategy for training, supporting, and developing infrastructure—all of which will transform our collective hope for a revitalized economy through food and agriculture into a reality.
Sectoral Study Areas

E-COMMERCE

AGRICULTURE AND FOOD
INCUBATORS

YOUNG FARMERS
Agro/Rural Tourism

SECTORAL OVERVIEW
The tourism sector represents an important part of the Greek economy. In 2014, the total contribution of tourism to Gross Domestic Product (GDP) was 29.4 billion Euro (or 17.3 percent of national GDP), and tourism accounted for 700,000 jobs (or 19.4 percent of total employment). The World Travel and Tourism Council forecasts that total contribution of tourism to Greece’s GDP will rise to 43.8 billion Euro by 2025.

Most agro/rural tourism enterprises in Greece are small family companies and owner-operated businesses led by entrepreneurs with a drive to share their favorite places and passions with others. Most enterprises employ no more than 10 employees annually, and most of those employees are part-time (with the exception of family members). On average, the number of full-time employees is four to five per enterprise, while the number of part-time employees can reach 10 to 15 per enterprise, implying that agro/rural tourism is a labor intensive sector.

OPPORTUNITIES AND CHALLENGES
Opportunities: The future of Greek tourism relies on the development of a diversified and multidisciplinary tourism product as well as the promotion of special interest tourism products, such as agro, rural, eco, culinary, and cultural/religious tourism. Entrepreneurs believe that the agro/rural tourism sector will grow in Greece, suggesting that efforts to increase employment opportunity for youth in the sector should focus on leisure/outdoor activities and those related to gastronomy, culture, and physical and mental health.

Additionally, the specialized agro/rural tourism sector is poised to promote job growth in the countryside. Hotels that are based more on a mass tourism model show high occupancy during the summer months and almost no occupancy during winter, while they have fewer employees in comparison with the ones that attract tourists through online booking (like agro/rural tourism enterprises).

Challenges: Despite the potential of tourism, main challenges to its growth include seasonality and Greece’s image as an undifferentiated sun, sea, and sand destination. Further, youth and entrepreneurs must have access to training and invest in e-marketing and networking if they are to succeed in creating a local or national agro/rural tourism destination.

CAREER PATHWAYS
Field research supports entrepreneurial opportunities relating to:

- food/culinary tourism (e.g. cooking lessons and tasting, guiding),
- outdoor recreation (e.g. climbing, cycling, bird-watching), and
- glamorous “camping,”

- destination management and specialized tour operating/travel agencies, independently or in cooperation with agro/rural and cultural tourism enterprises and public authorities;
- development of applications for portable personal computing devices (e.g. navigation of visitors by cycle and on foot, signing, e-networking of enterprises/services); and
- supplier services (e.g. linen cleaning, disinfection, gardening, equipment maintenance, marketing, accounting, tourist transportation).

Study led by Maria Emmanouilidou, Alternative Tourism Program Leader, American Farm School
Apiculture

SECTORAL OVERVIEW
Apiculture is considered one of the most attractive agricultural sectors in Greece. While Greece is not able to compete with many other countries in quantity and low prices, it can compete in quality, capitalizing on the increasing popularity of the healthy Mediterranean diet and subsequent demand for quality honey and other hive products. Tourism, especially in the islands, is an important supplementary activity that promotes Greek honey and simultaneously supports rural areas.

OPPORTUNITIES AND CHALLENGES
Opportunities: There is keen interest among many young people, including those with high levels of education to start a beekeeping enterprise. This interest comes from both rural and urban areas. Available land is the main limiting factor for the entry of young farmers, but beekeeping perhaps is the only agricultural activity that does not require land because bees can be moved into any public or other land resource. Further, the dry climatic and soil conditions of Greece favor the growth of aromatic plants and those supporting production of honey with excellent flavors. The basic critical success factor for this sector is the superior product quality and the increasing demand.

Challenges: In starting a new beekeeping business, for which the know-how is limited, a well-designed training program must be developed. Some mistakes while working with bees can be painful; also, any person who is allergic to bee venom should not be engaged in beekeeping.

CAREER PATHWAYS
Starting in the beekeeping profession is possible for young people, even those with limited to no experience in beekeeping, thanks to a proliferation of training and business support programs offering insight into new techniques in beekeeping management, ways of marketing hive products, and methods of pest control. Apiculture is also a viable second occupation for a young person, as a beekeeping enterprise can be started with a low budget ($1,000 to $1,500).

Study led by Pashalis Charizanis, Professor, Agricultural University of Athens
Alternative Fruit Crops

SECTORAL OVERVIEW
Alternative fruits have received significant attention during the past 10 years in Greece, mainly for their high levels of antioxidants and health-related benefits. In particular, many published articles and scientific studies promote the benefits of pomegranates, blueberries, goji berries, aronia berries, hippophaes (sea buckthorn), blackberries, strawberries, and others. They have many applications and uses: Fruits can be consumed fresh, dried, and processed as jams, preserves, and juices; in the pharmaceutical industry, extracts can be used for production of syrups and dietary supplements; and these plants are also an important source of anthocyanins, which can be used as safe food colorants.

The variety of potential uses, the continuous and increased interest of consumers, and the diversity of microclimates in Greece have led to the systematic cultivation of alternative fruits in Greece during the past five years. The sector is dynamic and promising, and there are many regions in Greece where alternative fruits can be cultivated. The result is quality products of increasing demand for export to the countries of the European Union.

OPPORTUNITIES AND CHALLENGES
Opportunities: Alternative fruit is an attractive sector for youth, as it appears to produce high quality products, enjoy great awareness by prospective and existing farmers, and hold promise for increasing use in the food industry. Additionally, the cultivated area of alternative fruit crops has consistently increased in recent years (both in terms of increasing hectares each year and additional farmers entering the sector), and there is a chance to invest in establishing more processing units via national development programs.

Challenges: This sudden increase in cultivation has a negative side effect that is seen in the form of lack of knowledge and experience in alternative fruit cultivation techniques and practices, crop protection, processing, and marketing. Furthermore, many issues in cultivation practices and marketing need to be addressed, and appropriate supporting programs need to be implemented to organize the sector and reach its greatest potential.

CAREER PATHWAYS
The alternative fruit crop sector offers a way out of unemployment for youth who can either start their own farming operation or become employed in processing units. Additional job opportunities exist for land workers, as many cultivation practices are done manually. Moreover, jobs for young scientists support farmers in cultivating and investigating potential new varieties or species, and developing new products for the processing industry. Other specialized personnel can benefit from new jobs created in collateral activities such as marketing, sales and distribution, tourism (especially agrotourism), equipment manufacturing, trade, and information technology.

Study led by Michalis Genitsariotis, Agronomist-Project Manager, American Farm School
Aquaculture

SECTORAL OVERVIEW

Marine aquaculture is a success story in Greece. In the early 1980’s, the first hatcheries supplied the first fingerlings for on-growing in cage farms, and, because European Union (EU) imports of fishery products outnumbered its exports, aquaculture quickly became a priority. As a result, major EU funding programs and a few entrepreneurial individuals have facilitated rapid growth of this sector. In just two decades, production increased 1,000 percent among 320 Greek fish farms. Greece reached a peak in 2008 by producing more than 450 million fingerlings and 148,509 tons of fish (this production has since been reduced in order to restore satisfactory prices, with 115,580 tons of fish produced in 2014). In all, Greece became, and still is, the largest producer of seabass (*Dicentrarchus labrax*) and seabream (*Sparus aurata*) in the world.

The mussel culture sector in Greece developed after the successful introduction of single long-line floating technology during the mid-1980’s. Today, this sector is mainly export-oriented. Annual mussel production in Greece ranges from 25,000 to 40,000 tons, with close to a maximum of 45,000 to 50,000 tons projected for coming years.

OPPORTUNITIES AND CHALLENGES

*Opportunities:* Though required investments for intensive farming of sea bass, sea bream, sole, meagre, and turbot are quite high (demanding capital in excess of 1 million Euros), there are opportunities that are less capital-intensive, the first of which is creating small facilities (15 tons annual capacity) for the production of organic sea bass and sea bream. These facilities could also offer fish tourism and diving services. The second opportunity lies in the rearing of sea mussels in farms of roughly 4 hectares producing 400 tons per year.

*Challenges:* In addition to high start-up costs, the aquaculture sector requires support in providing advisory services, education, and research in the promotion of human capital, networking, entrepreneurship, competitiveness, and innovation. The creation of integrated communication, extension services, and a training center is also needed to facilitate employment and investments in aquaculture. In the mussel sector, expected expansion is limited by the small number of suitable estuaries or closed bays. Further, structural problems in Greek mussel farming, such as poor marketing, lack of organized dispatch centers or purification plants, and depreciation may put at risk the profitability of relatively small farms.

CAREER PATHWAYS

There is potential for increased seafood consumption in Greece and Europe, which translates to increased career opportunities, especially for young people—not only because careers can be oriented toward novel methodologies (e.g. organic farming), but also because they can work in tandem with alternative tourism activities, particularly in attractive tourist areas.

Study led by Eleni Milia, Associate Professor, Agricultural University of Athens
Bakery, Confectionery, and Pasta

SECTORAL OVERVIEW
Demand in the artisanal bakery and confectionary sector is significantly affected by factors including consumption patterns, eating habits, tradition and traditional standards, and disposable income in relation to the price and quality of particular products.

At present, there are an estimated 9,000 bakeries operating in Greece and it is likely that number will decrease to 6,000 in the coming years. Surviving bakeries will not necessarily belong to existing owners, but to new entrants that employ the right combination of skills, business strategy, and innovative products and practices.

OPPORTUNITIES AND CHALLENGES
Opportunities: Expatriate populations and the growing international demand for Mediterranean food products contribute to the potential for increasing exports of traditional bakery products. Increases in the consumption of fresh and handmade pasta create new opportunities for small-scale entrepreneurship, especially when combined with agro and cultural tourism. Although there is a great degree of centralization of the pasta sector, small producers are increasingly entering the market, resulting in an increase in local and traditional pasta products and fresh pasta using local raw materials.

Challenges: Second and third generation business owners of existing companies are well-educated in business and marketing, but there is lack of orientation in engineering, chemistry, and food science. The bakery and confectionary sector is also devoid of new product development laboratories and specialized scientists to record, create, and develop the products of Greek culture.

CAREER PATHWAYS
Career opportunities abound for technical experts equipped to offer education and training, as well as research and development. Experienced lab technicians can offer much-needed expertise to second and third generation business owners in need of specialized food-science training.

One way to offer these services is to establish incubators to increase and apply knowledge and skills for new technologies, improve consistency and quality, reduce production costs, and substitute imports with Greek raw materials. This will create and support more innovative and internationally focused entrepreneurs in the sector.

Also, since reasonably low prices have boosted the pasta market in an atmosphere of economic crisis, and fresh and handmade pasta appeals to those seeking perceived higher quality, additional career opportunities exist in small-scale entrepreneurship and its connection with agrotourism.

Study led by Nikos Chatzilias, Researcher/Business Developer, American Farm School
Dairy Sector

SECTORAL OVERVIEW
Greece has a long tradition in small ruminant farming. Thus, sheep and goat milk as a whole make up almost 60 percent of total milk production, with the remaining 40 percent being cow milk. Livestock inventory includes 9.5 million sheep and 4.5 million goats, compared to 154,000 dairy cows. The majority of sheep and goat milk is used for cheese making, while cow milk is mainly used for pasteurized milk and yogurt production.

Nearly 80 percent of sheep and goat milk derives from small and family farms highly dependent on family labor, with almost 115,000 families and over 500,000 people engaged in the primary dairy sector. The secondary dairy sector is comprised of 53 big dairy companies and 671 small- to medium-sized family dairy enterprises that employ 11,802 people and process all types of milk into a variety of products, primarily pasteurized milk, yogurt, and cheese.

OPPORTUNITIES AND CHALLENGES
Opportunities: Greece has, worldwide, the highest per capita cheese consumption, with almost 30 kilograms consumed annually. At the same time, Greek cheeses and yogurt are the export leaders of the dairy sector, showing a consistent upward trend even during the current economic crisis. In recent years, consumption of Greek yogurt is dynamically increasing around the globe as a significant part of a healthy diet.

Challenges: Despite the fact that Greece is the world leader in per capita production of goat milk, there are practically no well-known and established cheeses produced exclusively from goat milk. Instead, the goat milk is conventionally mixed with sheep milk for the production of the majority of Greek cheeses. Further, most small- and medium-sized enterprises do not collect goat milk once sheep milk production is over (though it is available), thus resulting in almost two lost lactation months. Moreover, young people revisiting the dairy farming and processing sector require stable economic and legislative environments, as well as well-coordinated educational curricula.

CAREER PATHWAYS
The sector presents young people with great opportunity to invest in innovative dairy products, among others from goat milk and/or by using the autochthonous microbiota of Greek traditional dairy products. Moreover, there is increased demand for young professionals interested in related agrotourism initiatives as well those capable of implementing e-commerce as a tool for better promoting dairy products and developing business in the dairy sector.

Study led by Effie Tsakalidou, Professor, Agricultural University of Athens
Greek Wine and Spirits

SECTORAL OVERVIEW
Roughly 66,000 hectares of Greek land is used for cultivating wine grapes, yielding a wine production of 3,343 thousands and 0.12 thousand hl of tsipouro production. In 2014, median monthly household expenses in this sector reached approximately 5.93 Euro, and the total value of bottled wine ranged between 190 and 200 million Euro.

Greece offers over 300 native grape varieties, which differentiates Greek wine. There are about 700 wineries, with active production sites across the mainland and the islands. In 2014, exports reached a valuation of 63 million Euro, with chief destinations being Germany (49.4 percent) and France (13 percent). During the last 10 years, though, exports to the USA and Canada increased 20 percent, ranking American and Canadian markets as 2nd and 4th, respectively, among importers.

OPPORTUNITIES AND CHALLENGES

Opportunities: The Greek wine and distillates sector can be characterized as an attractive economic sector with great potential. The sub-sector of bottled wines and distillates in particular offers a unique opportunity for new entrepreneurs who wish to be involved in both production and commerce, making the industry more approachable and desirable.

Challenges: Development of a small to medium sized winery in the various viticultural regions of Greece must be achieved synergistically with other sectors such as tourism. Tourism and e-commerce should be an important supplementary activity in order to promote Greek wine and simultaneously support rural areas.

CAREER PATHWAYS
The sector presents young people with great opportunity to invest in the rarity and uniqueness of Greek varieties, while producing high quality wines in accordance with international standards.

Study led by Georgios Kotseridis, Assistant Professor, Agricultural University of Athens.
Livestock Farming

SECTORAL OVERVIEW

Greece's swine and poultry sectors survive in a very competitive global market, independently and on subsidies, amid high seasonal price fluctuations. These sectors are well organized and integrated, as compared with other sectors, and alternative farming activities (like free range and organic farming) have expanded their economic sustainability. The dairy cattle sector, with self-sufficiency at about 40 percent, is an intensive one, with sufficient new technology applications. Commonly, cows are kept indoors year-round with zero grazing. The very high feeding cost, combined with inefficient management and relatively low productivity, reduces competition and, potentially, the sector's ability to survive in the long term.

The beef cattle sector has a very low self-sufficiency (about 18 percent) and cannot be expanded due to limited available grassland. However, free range beef cow farming for the purpose of fattening beef calves for production, when combined with a butcher shop, is quite profitable. The sheep/goat farming sector, primarily for milk and also for meat production, operates under the most appropriate farming system (extensive, semi-intensive, and intensive) for each area. It is technically feasible, economically efficient, and environmentally friendly, and is the most sustainable among these sectors with the lowest risk under the country’s conditions.

OPPORTUNITIES AND CHALLENGES

Opportunities: Because of the financial crisis and subsequent widespread unemployment, the young generation—even those with a high level of education—are investigating the possibility of entering production, with the intention to upgrade their training to provide added value to produced products. The higher education of many in this generation, like knowledge of foreign languages and informatics, will enable advanced communication with and entry into new markets.

Challenges: Livestock farming has a negative reputation among Greek society because it is associated with a hard life, low income, and low educational levels. Thus, it is rare for farmers to want their children to succeed them in their business. Most families want to educate their children and encourage them to finish at least high school in order to be trained for a better job.

CAREER PATHWAYS

The different animal production sectors, promising entrepreneurial activities include:

• Alternative poultry farming (e.g. organic, free range) for eggs and/or meat production, potentially combined with other forms of economic activity (e.g. agrotourism);
• Free range or organic swine farming for meat production;
• Free range beef cow farming for fattening beef calves, combined with former-owned butcher shops;
• Sheep/goat farming under the most appropriate farming system (extensive, semi-intensive, intensive); and
• A small farm with all animal species (horses, cows, pigs, sheep, goats, hens, turkeys, geese, ducks, rabbits, etc.) or only companion animals, combined with agrotourism.
SECTORAL OVERVIEW

Processed meat sales exceeded 1.4 billion Euro in Greece in 2013, while processed fish sector sales approached 340 million Euro. Despite the severe economic crisis, employment in the processing sector has stayed relatively stable, although variations have been exhibited through the years.

This sector produces a wide range of products with diversity in production methods and raw materials used. The meat sub-sector is highly dependent on imported raw materials, as Greece has very low levels of self-sufficiency in most meat categories. On the other hand, the fish sector is based on the domestic production of raw materials from fisheries and aquaculture, as well as on imports.

The meat sub-sector is relatively traditional, with large and medium companies including traditional or specialty product lines in their offerings. Many of the small-scale processors produce traditional regional products, and utilize traditional production methods. Some small-scale producers successfully focus on specialization, such as using local raw materials, meat from Greek breads, rare meat types or processing methods. Some see no benefits in the protection of unique product character, while others use patents as a source of competitive advantage.

OPPORTUNITIES AND CHALLENGES

Opportunities: While there are a recognized number of traditional meat delicacies, the sales potential for protected geographic indication and “traditional specialty guaranteed” products remains unexploited in the sector. A meat processing incubator could facilitate the development of youth entrepreneurship in this sector, especially for unemployed butchers or young people from families with animal farms.

Challenges: New meat processing companies require high capital investment to establish new processing units. In the fish processing sector, opportunities for youth employment are very limited, mainly because of the current low impact on employment potential.

CAREER PATHWAYS

The meat processing sector offers a number of opportunities for entrepreneurship and job creation among existing firms. There is particular demand for traditional products, culinary tourism, and poultry. More long-term opportunities include the exploitation of international demand for specialty products, import substitution potential, and international niche markets.
Medicinal and Aromatic Plants

SECTORAL OVERVIEW
Comprising a very special group of flora with an extensive range of uses, medicinal and aromatic plants (MAP) have been used since ancient times for health reasons, including disease recovery and wound healing. Their special ingredients add excellent taste to food and provide the basic material for perfumes, cosmetics, beverages, seasonings, and medicines. Although used for millennia, MAP have just recently started to be cultivated systematically. Packaging facilities are found all over Greece, while distilleries are located primarily in the northern part of Greece. There are a few companies that export high value-added products, and there is certainly room for more.

The global market for MAP is very large and shows a consistent upward trend. Greece has been blessed with having many indigenous MAP, and many biotypes have evolved because of the diversity of microclimates. Furthermore, topography of Greece and variety among its environmental conditions make it an excellent location for the production of undemanding MAP on marginal land. Professional production of MAP in Greece is now beginning, and there is great opportunity for efficient organization of its primary production, processing, and marketing.

OPPORTUNITIES AND CHALLENGES
Opportunities: The MAP sector in Greece is valuable and demonstrates the potential to engage enterprising youth. Demand for MAP is increasing in domestic and international markets, and there is room for vertically integrated units of production. With the cultivated area for MAP increasing, investment in this sector provides economic and workforce opportunity for youth.

Challenges: For this sector to reach its potential, levels of training and expertise must increase among those involved, and well-developed business plans must be successfully implemented.

CAREER PATHWAYS
There is strong potential for the MAP sector in Greece to create new jobs, especially in the primary sector, because production is relatively low in comparison to neighboring countries. Specifically, opportunities exist for land workers since there is a lot of manual work required for MAP cultivation. New entrepreneurs can develop MAP-related jobs for industrial workers and scientists, who can be employed in production, research, and development activities in a number of industries (e.g. food, beverages, seasoning, pharmaceuticals, and cosmetics). Finally, a number of other specialized personnel can benefit from new jobs in collateral activities, such as marketing, sales and distribution, tourism (particularly in agrotourism), equipment manufacturing and trade, and information technology.
Success Network at a Glance

• 100 Meetings and Expanded Network Development Activities

• 150 Researchers, Faculty, and Staff Identifying Youth Employment Opportunities

• 1,200 Individuals and Companies Participated in Interviews, Focus Groups, Meetings, and Surveys - mostly from mainland Greece and Crete, as well as in the U.S, U.K., Germany, France, and Russia

Map Identifiers

1 AMERICAN FARM SCHOOL

2 AGRICULTURAL UNIVERSITY OF ATHENS

3 ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ STAVROS NIARCHOS FOUNDATION

Study Participant Location
Agriculture Demonstrates a Pathway for Economic Growth for Youth

Greece’s Largest Employers

- Retail / Wholesale: 650,020
- Agriculture: 503,158
- Manufacturing: 336,094
- Public Admin: 333,252
- Food Retail: 286,744

While youth unemployment rates exceeded 50 percent in 2012, the findings highlighted from the 2015 Endeavor Greece report entitled “Creating Jobs for Youth in Greece” revealed how Agriculture and Food-related sectors held up during the period of 2008-2013, demonstrating the future opportunities for economic growth for young Greeks.

Economic Activity Stalled Except Agriculture

- Agricultural Production: +10%
- Tourism: -36%
- Retail: -35%
- Industrial Production: -26%
- Cars: -78%
- Construction: -70%
- Advertising: -70%

Period 2008-2013

Greece’s Aspired Growth Model

Mediterranean Diet and Cuisine

SECTORAL OVERVIEW
Consumers express enduring enthusiasm for not only the Mediterranean diet, but also for Mediterranean cuisine. Modern consumers see these as vehicles for authenticity and distinction, and the purchase and consumption of novel products as a form of self-expression, particularly among foodies and the millennial generation. Google Trends analysis (an indication of intent to consume) points to an increasing interest in Mediterranean diet and cuisine, outperforming ethnic cuisines at the global and regional levels. In the USA, the Mediterranean cuisine specialty food sector is emerging among importers and retailers, with long-term positive growth prospects.

OPPORTUNITIES AND CHALLENGES

Opportunities: Specialty foods are becoming an increasingly significant part of the American diet, and represented over 15 percent of the total food market in 2014 at over 103 billion Euro in sales. Specialty foods are growing nearly 10 times faster than the overall food and drink sector. Moreover, during the past five years in the USA, mainstream grocery stores have added and/or expanded their international aisles, with an average growth rate of 5 percent per year, and amounts projected to reach about 4 billion Euro, or 11.8 percent of total retail food, in 2016.

The ethnic food sector also holds enormous potential for growth in Europe. In the UK, for example, sales of ethnic food reached 2.45 billion Euro in 2015, which was more than half of the entire European market.

Challenges: There is a need for the development of a specialized career path at the graduate level for both business and food science studies. The latter could help the Greek food sector compete by translating the constantly changing demands and market need, in both new products and packaging.

CAREER PATHWAYS
Research indicates an increasing interest in Mediterranean diet and cuisine at global and regional levels (Germany, France, UK, USA, and Russia), and room for developing exports of Mediterranean diet and cuisine products. The gap between the market demand and Greek producers can be overcome by well-educated, specialized young consultants supporting this food sector.

Study led by Rodica Arpasanu, Researcher, American Farm School
Modern Greek Organic Agriculture

SECTORAL OVERVIEW
The conditions for the development of organic agriculture in Greece are positive. In addition to favorable climate and soil conditions in several regions of the country, there is a strong interest in entrepreneurial activity in the sector, not only by farmers, but also by residents of urban areas sensitized to environmental issues.

Despite the economic crisis and the decreases experienced in the sector in 2013 and 2014, Greek consumer demand for organic products is increasing. In addition, there is a growing demand by international consumers, particularly from countries outside the European Union, where Greek organic products are better received because of their high quality, low prices, and their association with tourist destinations.

OPPORTUNITIES AND CHALLENGES
Opportunities: The “float system,” which can produce high quality seedlings, is not yet used by producers of organic seedlings. This system presents an opportunity for young people with little capital to get involved in the organic vegetable sector.

Another emerging trend, biodynamic agriculture, is attractive to farmers who search for innovative production systems based on the basic principles of organic agriculture. This trend has spread worldwide - its numbers have risen in the last five years in Greece and abroad, and it is expected to continue developing.

Challenges: Potential barriers to new enterprises entering, developing, or expanding in the sector include high competition of foreign organic products, lack of capital availability, increased taxation, and cumbersome bureaucracy.

CAREER PATHWAYS
Organic agriculture is in an infant stage and has high potential. Organic agriculture trends present a unique and positive opportunity for young people. This market is not overcrowded yet and, with the right training, young unemployed people and young farmers can find opportunities. The combination of organic agriculture and agrotourism gives rise to “organic agro-eco tourism,” which can be a great opportunity for many unemployed young people to return to their villages and convert unexploited family fields into organic agro-eco tourist businesses.

Study led by Demetrios Billalis, Associate Professor, Agricultural University of Athens
Olive Oil and Table Olives

SECTORAL OVERVIEW
More than 70 percent of global olive production comes from the southern regions of the three main producer countries. Among these, Greece has the largest share, with 14 percent of agricultural land covered by olive groves.

Greek olive oil is of superior quality, since 80 percent of production yields extra virgin olive oil. The main export destinations are Italy, Germany, the USA, the United Kingdom, and Canada. Despite the comparative advantages of Greek olive oil, only 25 percent of Greek production reaches the stage of labeling, branding, and marketing. The remainder is sold in bulk form, including 70 percent of exports. In fact, Greece’s market share in the global branded olive oil market decreased from 6 percent during the 1990’s to 4 percent during the past five years. In order to reposition the Greek model toward the promotion of high quality branded olive oil, the sector must be restructured to include more vertically integrated production, both upstream in the olive production stage, as well as downstream in the branding stage.

There is significant untapped potential in the table olives sector, as 75 percent of Greek exports are in bulk form. As the average price of bulk table olives is much lower than that of branded offerings, production of the latter could help the Greek olive industry.

OPPORTUNITIES AND CHALLENGES
Opportunities: Entrance of new enterprises into the olive oil and table olives sector is fairly easy and accessible due to minimal institutional and legal obstacles, as well as a medium capital requirement. Because Greece’s volume of olive production exceeds population needs, access to olive fruits is plentiful.

Challenges: High production costs, due to small farm sizes and higher milling costs, make it difficult for Greek producers to benefit from the global growth in olive oil demand. Further, the standardization of quality control, which is vital for the promotion of premium olive oil, is not supported by the existing fragmented nature of Greek olive oil cooperatives.

The industry also lacks widespread access to distribution channels, which can be costly to develop. Further, the fact that domestic demand and exports are mainly covered by bulk olive oil and table olives is the biggest obstacle for processing/standardization companies.

CAREER PATHWAYS
The sector does not have substantial obstacles, and the entrance of new enterprises is fairly easy and accessible. In addition, capital requirements are medium and an investor can easily access the raw material. Opportunities for youth exist for innovative product advertising, promotion and marketing, which will help enterprises compete with established companies.

Study led by Efstratios Panagou, Assistant Professor, Agricultural University of Athens
Propagating Material for Ornamentals, Vegetables, Crops, Fruit-Trees, and Vine

SECTORAL OVERVIEW
Greece is mainly an importer of propagating material (PM), although it boasts many favorable factors for the development of its production, including isolated islands, fields with physical barriers, and a variety of microclimates.

Concerning PM for vegetables, the trade balance of seed imports to exports is clearly negative. Domestic seed production is mainly for crops of minor economic importance, or traditional varieties. The increasing demand for transplants is covered by large nursery enterprises, often part of a group of companies comprised of seed, nursery, and agrochemical/fertilizer trading.

PM for fruit trees demonstrates a tendency for wider use of high quality, certified material. While the market of vine PM in Greece shows a slightly increasing trend, the Greek ornamentals market is shrinking due to the economic recession. With 90-95 percent of total propagating material imported and the majority marketed by a few wholesalers, many of the entrepreneurs of potted plant and landscape ornamentals produce their own PM or market it illegally.

OPPORTUNITIES AND CHALLENGES

Opportunities: The PM production industry has the potential to grow in Greece due to favorable climatic conditions and existing technology. New farmers can benefit from targeting specific types of PM, in order to minimize competition from big international and Greek companies leading the sector.

Challenges: PM as a product has to be of high quality, and its production is governed by strict rules and legislation. The Greek state will need to develop the appropriate legal framework for registered production.

CAREER PATHWAYS
There is a need in Greece for seed production in the vegetables sector (popular consumables like tomato, pepper, cucumber, eggplant, etc. as well as wild edible leafy vegetables like dandelion and zochos), ornamentals sector (native Greek/Mediterranean flora and herbs for indoor/outdoor pot and landscape use), and high quality ornamental tree sector. Demand is also rising for peach tree PM, as well as almond, walnut, and pistachio tree PM due to favorable climatic conditions, lucrative returns, and intense use of nuts in confectionery.

In the arable crops sector, opportunities for new young producers include minor plants (new crops), local varieties, and PM for organic farming and aromatic, medicinal, herbal, culinary, and melliferous plants—sectors for which there is PM demand and limited interest from big companies in the industry.

Study led by Maria Papafotiou, Professor, Agricultural University of Athens
Vegetables: Open-Field and Greenhouse Production

SECTORAL OVERVIEW
In 2014, the share of vegetables, fruits, and other horticultural plants, based on production value at basic prices, amounted to 39 percent of the total agricultural output (TAP), totaling 9.7 billion Euro. About half of this is made up of vegetables. Greece is characterized by a mild winter climate, and is therefore considered an ideal site for economically viable seasonal and off-season vegetable production. In all, the vegetable sector, both open-field and greenhouse derived, is important for the Greek agro-food sector.

OPPORTUNITIES AND CHALLENGES
Opportunities: In the last few years, an appreciable number of young people, many of them well-educated, expressed an interest in starting agricultural enterprises. Most vegetables are grown as annual crops, and thus young growers starting businesses in vegetable production can generate income even during the first year of activity.

The initial capital investment for the start-up of open-field vegetable production is relatively low. Greenhouse production of leafy vegetables, which are cold-season plants, also entails a relatively low cost because no heating is needed and even simple high tunnel constructions or greenhouse designs can provide high yields and good quality produce.

Challenges: Among young people, knowledge about starting a new vegetable production business is limited. Further, greenhouse vegetable production requires an initial investment that can represent a barrier to many. Young people originating from regions with favorable soil conditions are advised to look for financing opportunities from state or private sources in order to establish a greenhouse enterprise.

CAREER PATHWAYS
One of the most promising options for youth in the vegetable sector is organic vegetable production because cultivation of organic vegetables in Greece is still very low compared to the demand in the domestic and international market.

Greenhouse vegetable production using modern technologies, such as hydroponics, also provides opportunities to young people who can afford the initial investment cost to construct a greenhouse or hire an existing greenhouse. Greenhouse production provides much higher income per cultivated area, and utilizes the agricultural land in areas with mild climatic conditions much more efficiently.
**SECTORAL OVERVIEW**

Grape cultivation and wine making have a distinguished place in the history of Western civilization. The ancient Greeks gave an importance to wine that greatly exceeded its role as a beverage, and wine has been an important part of Greek culture for over 4,000 years.

Greek climate and soil conditions favor vine cultivation. Greece is now ranked 13th worldwide in terms of vineyard surface area. It is ranked fourth in Europe in terms of table grape production, first worldwide in currant (Black Corinth) production, and eighth worldwide in dried grapes exports.

**OPPORTUNITIES AND CHALLENGES**

*Opportunities:* Viticulture is a dynamic sector with high potential. Table and wine grapes have many applications. They can be consumed fresh or dried, or as wines, distillates, and juices. There is a need and opportunity to increase the appreciation of native wine varieties, as their range and quality is remarkable and should be exploited in order to replace foreign varieties.

*Challenges:* The main obstacle in grape production is the initial cost of establishment, including purchasing specialized cultivation equipment and finding skilled and trained part-time workers for pruning, defoliation, and harvesting. There is also a lack of expertise and knowledge in marketing and e-commerce. Grape producers are not familiar with new technologies, whereas wineries use the Internet for transactions and promotion. The biggest problem identified for producers of wine grapes is the limited available planting rights to establish new vineyards.

**CAREER PATHWAYS**

Grape production has the potential to provide employment opportunities for youth, who can enter the sector as either grape producers or skilled vineyard workers. The establishment of organic and integrated farm management systems, and the promotion of the nutritional value and proven health benefits of wine, table grapes, and currants, can also make the sector more competitive. Finally, synergies with agro and cultural tourism can offer additional pathways related to the promotion of the sector, especially for wineries.
Farm Incubator

SECTORAL OVERVIEW
By providing business support services and resources tailored to young firms, business incubators nurture the development of entrepreneurial companies, helping them survive and grow during the start-up period when they are most vulnerable. The most common goals of incubation programs include creating jobs in a community, enhancing a community’s entrepreneurial climate, retaining businesses in a community, building or accelerating growth in a local industry, and diversifying local economies.

Farm incubator projects are land-based projects that offer aspiring and beginning farmers an opportunity to establish their own independent farm enterprises with on-site support and surrounded by shared equipment and facilities that reduce initial capital barriers to entry. They operate primarily on a specific land-based site or sites and provide low-cost or rent-free land for individual plots, while also providing access to resources (e.g. education, infrastructure, networking, and financial advice) that support the development of independent farm operators. Moreover, some multi-farmer operations allow each farmer to rent a small plot, which provides them access to land, training, technical guidance, and marketing assistance. The end result is that the farmer should be able to transition to a plot of his/her own, having acquired the skills, knowledge, and expertise necessary to start farming successfully.

OPPORTUNITIES AND CHALLENGES

Opportunities: Due to the economic crisis in Greece, more than 975,700 people were added to the already increased number of unemployed (378,000 in 2008), with the unemployment rate reaching 27.5 percent at the end of 2013. In such an alarming condition, agriculture and rural areas are turned into a shelter and an incubator of ideas and initiatives both for the rural population and for an urban population that is led there by need or by choice, affording an increased opportunity for youth entrepreneurship.

Challenges: Barriers to entry among aspiring and beginning farmers include access to land, equipment, hands-on experience, infrastructure, knowledge, markets, and capital.

CAREER PATHWAYS
The types of resources and services offered by farm incubator programs vary widely, but there exist three distinct types of programs through which specialized professionals can lend their expertise:

1. Educational incubators with a consulting focus, addressing lack of knowledge in both farm methods and business skills;

2. Land-based farmer training incubators, providing on-site education and hands-on training at demonstration farms for beginning farmers; and

3. Land-based agriculture business incubators, addressing lack of experience as well as land and equipment needs, by providing land and infrastructure, farming internships, farm skill training, and agricultural business development.

Study led by Thanasis Giamoustaris, Director of Educational Farm, American Farm School
Food Processing Incubator

SECTORAL OVERVIEW
Business incubation has been proven globally to support the growth of start-up businesses and help them to overcome failures due to lack of technical assistance, business plant development, financing, market analysis, and access to networks of customers and suppliers. As a result, the European Commission fully supports the need to establish business incubators as a priority instrument of the European Structural and Investment Funds (ESIF), as reflected in the regulatory framework for the new 2014-2020 programming period.

Supporting food processing in Greece is of particular importance, considering the small manufacturing component it has in the food supply chain. Yet, an integrated food processing business incubator mechanism is not available in Greece, and there is a limited number of similar processing incubators in Europe.

Establishing food processing incubators is justified by regional unemployment rates, available agrofood infrastructure, and regional priorities, and provides an opportunity to leverage current existing facilities and experience.

OPPORTUNITIES AND CHALLENGES
Opportunities: Potentials for higher value-added products exist in most of the food subsectors, as the degree of processing in Greece is substantially lower than the European or even Mediterranean average. Opportunities lie in the production and branding of traditional processed meat products, bakery items, dry pasta, ice cream, cheese production, sauces, condiments and dips, pickled products, packed fresh salads, dried fruits, and vegetables.

Research indicates that, for every job created in processing, an additional 2.8 jobs are created in the economy. Therefore, the establishment of a food processing incubator to drive young potential entrepreneurs throughout the development process could, on one hand, provide a substantial impact on their sustainability and, on the other, produce a multiplier effect on employment along the supply chain.

Challenges: A building area of 3,000 to 5,000 square meters is needed to cover the needs of at least 20 tenants. Site selection, facility construction, highway infrastructure, equipment, access to start-up capital, and experienced coordination and marketing are among the key challenges.

CAREER PATHWAYS
Entrepreneurial action in agroprocessing produces a significant multiplier effect along the supply chain. The investment generates demand for packaging, transportation, and agricultural products, which in turn generates demand for associated agricultural inputs. This then creates youth employment opportunities along the entire value chain, both on and off the farm.

Study led by Mathildi Saritza, Lecturer/Researcher, American Farm School
Identifying Young Farmers

SECTORAL OVERVIEW

The continued economic crisis has taken a heavy toll on both Greek society and the labor market in Greece. The severity of unemployment varies widely across age groups, with the highest rates being for males and females aged 15-24 and females aged 25-39. The underemployed, together with the unemployed, have come to represent a very high proportion of the workforce, which is close to or exceeds 50 percent of those 29 years of age or younger.

During the last six years, employment in Greek agriculture has decreased by 10 percent, and farms with young operators presented the highest rate of reduction. That said, when it comes to commercial farms (almost half of total Greek farms), those with young operators (up to 40 years of age) are much more dynamic than the average farm in terms of physical size, labor inputs, assets, and economic performance. In terms of increasing economic size, between 2011 and 2013, the most dynamic farms with young managers are those specializing in sheep, vegetables-flowers, and cereals.

OPPORTUNITIES AND CHALLENGES

Opportunities: A large majority of young farmers plan to expand their holdings by buying or renting land, making new investments in their existing holdings, and diversifying their production. The dynamism of young farmers is also evidenced by their export orientation and, to a lesser extent, their openness to e-commerce and product standardization. Primary incentives for young farmers include continuing the family farm and gaining access to lifestyle changes, education and training, land grants, and investment aids. Giving up on the existing farm is rarely seriously considered.

Challenges: Aging farming populations, long-term declining trends in farm numbers, and restrictive macroeconomic policy measures, along with aspirations for a pivotal role of agriculture as a way out of the crisis, are just a few of the pressures related to Greek agriculture today. The crisis manifests itself in financial difficulties, restricted access to capital, diminished access to land, as well as a constant decrease in farm incomes. Among young farmers, obstacles include a lack of capital infrastructure and funding for investment.

CAREER PATHWAYS

Young farmers and new entrants to agriculture play essential roles in boosting the competitiveness of the farming sector by undertaking new investments and modernizing agricultural holdings. The revitalization of the farming population is a prerequisite for viable food production, as well as for the development of rural areas.

Study led by Pavlos Karanikolas, Assistant Professor, Agricultural University of Athens
E-Commerce

SECTORAL OVERVIEW
Over the last few years, there has been consistent growth in all fields of e-commerce. In 2016, global sales for business to consumer (B2C) enterprises are expected to reach $1.92 trillion, and sales for business to business (B2B) operations are expected to reach $2.05 trillion.

Current statistics for Greek users show that for 25 percent of e-commerce customers’ online sales represent more than 50 percent of their total budget; 65 percent of all transactions take place on Greek web platforms; and the average value of purchases increased 10 percent since 2014.

OPPORTUNITIES AND CHALLENGES
Opportunities: Start-up or smaller agrobusinesses extensively use e-commerce and mobile- or m-commerce technologies for promotion and marketing purposes to better compete with well-established businesses. Businesses expanding their models utilize them as well. In both cases, online platforms and mobile applications create or extend ways of doing business, especially in digital marketing, social media campaigns, and online sales or purchases. Web and mobile applications also indirectly support many other business functions and extend income sources (e.g. logistics services).

Challenges: Greek farmers are particularly suffering from digital exclusion, especially commercially, despite the fact that the majority of them use mobile devices.

CAREER PATHWAYS
E-commerce and m-commerce technologies can improve the bottom line of agrobusinesses, improve market shares, facilitate new market expansion, and increase brand awareness. As a result, employment opportunities exist for youth trained in leveraging the power of modern technologies and who understand social media marketing. Furthermore, job opportunities exist for information technology personnel, and the inherent modularity of the technology allows for future job expansion in both information technology and agriculture.

Study led by George Kartsiotis, Lecturer/Researcher, American Farm School
Agrofood Link

To further the success of various business enterprises that rely on building relationships with other businesses or resources, the Rutgers University Research Team developed a scalable architecture designed to provide linkages between user groups around a common area of interest in the agrofood sector. This initiative will be a critical part of the RTY initiative, especially in furthering new ventures that might be pursued by youth entrepreneurs. To this end, the Rutgers Project Leadership Team again coordinated with the Rutgers NJAES Office of Research Analytics to develop a proof of concept of such a platform that could be customized to meet various sector needs in the future.

The RTY: Agrofood Link website is a proof of concept of such an interactive web architecture that draws inspiration from the Farm Link program that is active throughout most of the United States. This program aims to link agricultural landowners with new and young farmers in order to address two issues facing small-scale agricultural production: the under-utilization of quality farmland by landowners, and the accessibility and affordability of farmland for new and beginning farmers. The web tool moves beyond the typical static bulletin board based systems and provides a real-time, spatially aware, and user-customizable inventory of land and farming resources. Users can register with the site and post customized listings that provide detailed information about land resources and apprenticeship opportunities, as well as allow beginning young farmers to market their skills and experience to potential agricultural employers and landowners. The platform utilizes responsive design to provide easy access via smartphones and bilingual support to maximize the potential audience. The scalable and modular nature of the architecture developed for this site will also allow the team to customize it for various markets and uses, such as providing linkages between local agrofood producers and local businesses and restaurants in order to strengthen market connections between the agrofood and tourism sectors.

Application development led by Lucas Marxen, Assistant Director, Research Technology, Rutgers University.
In response to the growing need to ensure the accurate and consistent collection of relevant data in as close to real-time as possible, the Rutgers University Research Team developed a scalable research tool that could be utilized by our partners in Greece. This is vital in developing resource networks and evaluating program progress at varying stages. In this vein, the Rutgers Project Leadership Team coordinated with the Rutgers NJAES Office of Research Analytics to develop an online tool to meet these objectives. The *RTY: Agrofood Resource and Network Mapping Tool* provides a scalable platform that can be customized to meet various project needs moving forward and utilizes responsive design and bilingual support to maximize their utility among users.

The *RTY: Agrofood Resource and Network Mapping Tool* is a program-specific tool for research teams that allows for the unified collection of resources identified through on-the-ground data collection. This is a critical asset for engaging in youth recruitment, developing networks of partners and collaborators, and identifying key individuals or resources involved supporting the RTY initiative. The tool standardizes user input to reduce the possibility of data errors and provides geospatial tools to assist in collecting accurate locational information on resources. Integrated mapping features allow users to view resource data that has been collected in real-time. The web tool utilizes responsive design in order to provide a usable user interface on a variety of devices and can access GPS signal data to assist in data collection in the field through the use of mobile devices. Through the design of a scalable platform, the application can be expanded to assist in resource collection and the network mapping of additional areas of interest as they are identified through research and outreach efforts.

Application development led by Kenneth M. Karamichael, Associate Director, Rutgers Cooperative Extension, Rutgers University.
The Stavros Niarchos Foundation (www.SNF.org) is one of the world’s leading private international philanthropic organizations, making grants in the areas of arts and culture, education, health and sports, and social welfare. The Foundation funds organizations and projects that are expected to achieve a broad, lasting and positive impact for society at large, focusing on vulnerable groups, such as children and the elderly, and they also exhibit strong leadership and sound management. The Foundation also seeks actively to support projects that facilitate the formation of public-private partnerships as an effective means for serving public welfare.

2016 marks the 20th year of the Stavros Niarchos Foundation’s global philanthropic activity. Since 1996, the SNF has made grant commitments of $1.8 billion / €1.5 billion, through 3,534 grants to nonprofit organizations in 111 nations around the world.

Beginning in 2012, in addition to its standard grant-making activities, the Foundation embarked on a 300 million Euro grant initiative in an effort to help address the severe effects of the deepening crisis in Greece. On one hand the initiative aims to provide immediate relief support to the most vulnerable members of the Greek society. In addition, as part of the initiative, grants will be provided toward addressing the high percentage of youth unemployment, seeking to create better employment prospects and new opportunities for youth.

The New Jersey Agricultural Experiment Station (NJAES) is an integral component of Rutgers, The State University of New Jersey. Rutgers Cooperative Extension agents and specialists deliver wide-ranging educational programs in the areas of agriculture, fisheries, urban and community outreach, youth development, food, nutrition and health, and related areas of economic and workforce development across New Jersey.

The experiment station provides a diverse range of research, extension, and education programs that serve the people of New Jersey and the urban, suburban, and rural communities in which they live. Through its Cooperative Extension offices in all 21 New Jersey counties, 4-H agents, Extension specialists, Family & Community Health Sciences educators, and Agricultural and Resource Management agents work to serve New Jersey residents in every area of the state. In addition, nine off-campus centers focus on research that supports local agriculture and food-related businesses, and 10 centers and institutes on the George H. Cook Campus engage in world-class research that provides solutions for the problems facing New Jersey residents.
American Farm School

The American Farm School of Thessaloniki, Greece, is an independent, nonprofit educational institution founded in 1904 to serve the needs of Greece and the surrounding Balkan areas. Today major educational divisions include the Primary School, Secondary School, the Perrotis College of Agriculture, Environment and Life Sciences, and Adult Education and Research. The School prepares its graduates for prominent roles in community life and in the agriculture and food sectors by teaching farming and business practices that are economically viable, ecologically sound and socially responsible.

The School’s founder, Dr. John Henry House, was a practical idealist who believed in educating the whole individual: the head, the hands, and the heart. After more than a century of implementing the founder’s vision, the American Farm School today remains dedicated to the dynamic fusion of theory and practice in all levels of agricultural education that has become the institution’s hallmark.

Agricultural University of Athens

The Agricultural University of Athens (AUA) is the third oldest university in Greece, after the University of Athens and the National Technical University of Athens (Metsovio). It was established by law in 1920 (Law 1844/1920) as an Independent Higher Education Institute with university status under the name of the Highest Agricultural School of Athens (H.A.S.A.).

The Agricultural University of Athens (AUA) offers high-level undergraduate and postgraduate Education and Research in Agricultural Science, and its vision is to achieve Educational and Research Excellence so as to occupy a dynamic position in the international academic environment.

True to its traditional role of responding to the productive and developmental needs of the Greek economy and society, AUA intervenes and develops in line with the development and orientation of modern education and science. Moreover, it is in continuous contact with society so as to make proposals and provide solutions to problems that arise within the agri-nutrition sector.
Research Contributors

The following is a list of researchers and those who contributed to this project. We would like to thank the many industry, community, and municipal leaders who supported this research, and all those whose valuable perspectives helped us to develop this report.

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USEFUL LINKS

Stavros Niarchos Foundation
snf.org

Rutgers, The State University of New Jersey
rutgers.edu

Agricultural University of Athens
aua.gr

American Farm School
afs.edu.gr

New Jersey Agricultural Experiment Station
njaes.rutgers.edu

Rutgers Cooperative Extension
rce.rutgers.edu

Hellenic Republic: Ministry of Rural Development and Food
minagric.gr

European Commission:
Agriculture and World Development
ce.europa.eu/agriculture/

View the full versions of the studies and research of New Agriculture for a New Generation online at greece.rutgers.edu.
Pathways for a Productive Future

The Stavros Niarchos Foundation (SNF) has asked the university partners who conducted the Phase 1 studies, summarized in this report, to prepare a multi-year proposal for implementation of the *New Agriculture for a New Generation* program (the Phase 2 proposal). This proposal is currently in draft form and under active consideration by SNF.

The beginning of Phase 2 will focus on a subset of the agricultural and food system sectors that are considered most promising and attractive for early success in developing youth employment opportunities and/or will set the stage for growth and continued success in the future.

Elements of the strategic thinking behind the start-up of Phase 2 include:

- a targeted regional focus based on findings from the Phase 1 sectoral studies with future plans for national expansion;
- engagement and networking with other agriculture and food sector initiatives for training and workforce development, including the commercial sector, regional and prefectural training centers; other non-profit organizations; the national government agencies; other universities; institutions offering banking and credit services; and the European Union initiatives in support of agriculture and food developments in the country; and
- laying the groundwork for development in the Greek public sector of an extension and advisory service.

The strategy calls for targeted investments in infrastructure, beginning with at least one location that will serve as a farming and workforce training business incubator and one location that will serve as a food product development, processing, and marketing business incubator. These incubators will be key facilities for training programs, to be supplemented by use of other training locations, such as existing farms that could host internships, including those operated by the Greek university partners and in the private sector.

In addition to collecting and monitoring program objectives, data, benchmarks, and performance, we will also build into our plans steps to ensure full sustainability of this effort within a decade. From the onset, we will be designing a system that can be transitioned to a durable and sustainable public sector organization.

By promoting agriculture as a dynamic and profitable industry, prioritizing workforce development training, and supporting innovative entrepreneurial initiatives in the agrofood industry, the proposed project will target sectors with great growth potential and promise for successful reduction of youth unemployment. By developing an interdisciplinary system, including academia, industry, and the private sector, and by maintaining sensitivity to regional factors, the implementation phase of *New Agriculture for a New Generation* will position agriculture and the food sectors to pave the way in reducing youth unemployment and driving economic growth in Greece.