

# **Database of Microenterprises in Puerto Rico: The Case of the Agricultural Industry.**

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## Resumen

Las empresas a pequeña escala son importantes para el desarrollo económico, la calidad de vida y una mejor distribución de la riqueza en los países alrededor del mundo. En Puerto Rico, los roles de las microempresas son casi desconocidos debido a la falta de investigación en esta área. A pesar de esta omisión en la literatura, el gobierno y otras partes interesadas están apoyando y promoviendo estas entidades como posibles vías de creación de empleos y soluciones para la crisis económica actual. Dado esta limitación de información, el objetivo primario de este trabajo fue diseñar un instrumento para recolectar la información necesaria para la creación de una base de datos de microempresas agrícolas en Puerto Rico. El cuestionario se creó luego de una extensa revisión de literatura. Como objetivo próximo es la recopilación de datos, por lo menos cinco años, de los mismos sujetos para crear un panel o censo. Además, la muestra se podría extender para investigar otras industrias. El instrumento proveerá un perfil de los microempresarios y sus negocios a corto y largo plazo. Una vez se cree la base de datos, ésta servirá para hacer más investigaciones para crear política pública, enriquecer la enseñanza y apoyar el trabajo de consultoría. Finalmente, se espera que la base de datos propuesta, dado su singularidad, posicione a la Universidad de Puerto Rico como líder en investigación en esta área.

**Palabras claves:** microempresas, Puerto Rico, industria agrícola, empresarismo, auto empleo

## Abstract

Small-scale enterprises play an important role in the economic development, quality of life, and better distribution of income of countries around the world. Such roles are unknown in Puerto Rico as research is limited in this area. Despite this omission, government and other interested stakeholders are heavily supporting and promoting these entities as possible source for employment and solution for the current economic crisis. Given this oversight in literature, the primary objective of this work was to design an instrument to collect the data to create a database of the microenterprises in Puerto Rico in the agricultural industry. The questionnaire was designed after a careful literature review. The next objective is to collect data for at least five consecutive years among the same respondents to create a panel. Furthermore, the sample could be extended to include other industries. The instrument would provide data on the profile of micro-entrepreneurs and their businesses in the short and long term. Once these data is available, further research could be conducted for policy making, classroom enrichment, and consulting work. Finally, it is expected that the uniqueness of the proposed database place the University of Puerto Rico as leader in this research area.

**Keywords:** microenterprises, Puerto Rico, agricultural industry, entrepreneurship, self-employment

## **Introduction**

Small-scale enterprises play an important role in the economic development, quality of life, and better distribution of income of countries around the world. The most important contributions of these enterprises in the economic area are: development of new entrepreneurs, increased employment and exports, incentives for families to save and invest (Cabarrouy, 1999), and innovation (Bauchet & Morduch, In press). For many countries of the Third World micro and small enterprises' (MSEs) activities constitute a working place for as many as a quarter of all people of working age (Mead & Liedholm, 1998).

According to data of the International Finance Corporation (IFC) of the World Bank, for 2007, Puerto Rico had 2,050 micro, small, and medium enterprises (MSMEs) or 0.5 MSMEs per 1,000 people (Kushnir, 2010). Of those MSMEs, 53 percent are classified as microenterprises with less than nine employees; and 21.3 percent are in the food manufacturing sector. Policy makers in the Island had recognized the value of this sector in the economy and are promoting assistance programs to foster the development of such enterprises. Such assistance had come as training to entrepreneurs in businesses' activities, financial aid, and ease of organizing their businesses. Despite this important role of microenterprises in an economy, there are still many unanswered questions about them, especially in developing countries and Puerto Rico: How they grow?; What is the profile of micro entrepreneurs?; What are the obstacles they face for starting and for success?

Studies about MSEs look to provide insights about patterns of enterprises births, survival or closures, and growth, and the determinants of these various components of change. This information provides the necessary foundation for MSEs' promotion projects around the

world. In turn, these projects promote and support businesses' start-ups by addressing the constraints that make it difficult for people to establish new enterprises (Mead & Liedholm, 1998). Given the growing importance of micro-entrepreneurs and the promotion projects for the nurturing this organizations in Puerto Rico is imperative to have a profile on these individuals. The primary purpose of this work is to review the literature and construct a questionnaire to profile the Puerto Rican agricultural micro-entrepreneurs.

After a thorough review of the literature on MSEs, I can conclude that research is limited, almost inexistent for Puerto Rico. The research profiling micro-entrepreneurs usually does it for developing countries, being Africa the most studied. In addition, microenterprises are usually associated with informality and economic development in developing countries.

Puerto Rico is not unaware of the benefits and challenges that microenterprises might face. Therefore, governmental and private institutions are supporting the development of micro-entrepreneurs with financial aid and training. In order to provide a scientific base for all these efforts, an instrument was created. The questionnaire has 70 questions (see Appendix 1), including demographics, financing and operating activities of microenterprises.

The structure of the paper is as follows: Section 2 defines microenterprises and its relationship with informality. Section 3 explores the role of microenterprises in the development of countries. Section 4 provides a discussion on policy-making to foster microenterprises, including Puerto Rico. Section 5 looks to the dynamics of microenterprises, and Section 6 the barriers and challenges of micro-entrepreneurship. On section 7 an overview of the agricultural sector in Puerto Rico is provided. The last section presents the questionnaire and proposes the methodology for collecting the data.

## **2. Definition of Microenterprise**

“Micro and small enterprises are defined as income-generating activities other than primary production which employ 50 or fewer workers. Home-based enterprises are included as long as at least half of the output is marketed. Within the MSE category, microenterprises are those with ten or fewer workers; small enterprises range in size from 11 to 50” (McPherson, 1996).

The number of workers in microenterprises varies by countries, and sometimes, the number varies by industries. For example, in Mexico, micro-enterprises are manufacturing firms with 30 or fewer workers, retail firms with five or less employees, and service firms with 20 or fewer workers (McPherson, Molina & Jewell, 2010). In Africa micro-businesses usually have 1 to 3 employees (DeBerry-Spence & Elliot, 2012). In Puerto Rico, Law 152 (October 19, 2010) establishes the classification of microenterprises, which are entities with up to seven employees and maximum annual gross sales of \$500,000. The law also expresses the public policy for development of these entities, which at that time did not have any incentives.

According to the International Finance Corporation (IFC) (Kushnir, Mirmulstein, & Ramalho, 2010) there are 125 million formal MSMEs in the world.<sup>1</sup> This figure represents 71.2 percent of MSMEs operating in emerging markets. On average, there are 31 MSMEs per 1,000 people across the surveyed economies.

In Africa, microenterprises represent more than 90% of the private business sector and contribute to more than 50% employment and gross domestic product (GDP) (DeBerry-Spence

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<sup>1</sup> The report included 132 economies around the world. Time series data goes 20 years back for some of the countries.

& Elliot, In press). 98% of all African businesses are microenterprises (Spring & McDade, 1998) and are source of employment, income, and poverty alleviation (Rogerson, 2001).

In Mexico, the estimates are that approximately 3 million microenterprises exist, accounting for nearly 95% of all businesses in the country. According to Instituto Nacional Estadística Geográfica y Informática (INEGI)(2004), microenterprises account for an estimated 40% of the employment of Mexico (McPherson, Molina & Jewell, 2010).

Many times microenterprises are related with the informality concept<sup>2</sup> since it is recognized as a source of entrepreneurial energy and innovation (De Soto, 2000; Márquez, 1994; McPherson, Molina & Jewell, 2010). However, informality has many definitions<sup>3</sup> and dimensions, and it is difficult to measure empirically. Despite these limitations, researchers has come to include certain types of employment that usually encompasses informality in a country: self-employed, domestic employees, microentrepreneurs, occasional workers, family members (without salary) (Duany, 1991), and street vendors (Bustamante, Díaz-Pérez, Villarreal-Navarrete, 2009; Maneepong & Walsh, In press).

Despite these difficulties, researchers argue that fostering the informal activities of self-employed or entrepreneurs in the informal sector, would likely accelerate a country's socioeconomic development (Pisani & Patrick, 2002). In addition, evidence shows that no matter how informality is defined, it is still a principal component of Latin American (Gasparini & Tornarolli, 2009) and other developing countries' labor markets.

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<sup>2</sup> The informal sector has been defined as "income-earning activities unregulated by the state in a context where similar activities are so regulated (Portes & Schauffler, 1993, p.48).

<sup>3</sup> Informality as a concept was incorporated to social sciences' research back in the 1970s, and since then many definitions have emerged (Duany, 1991).

Ayyagari, Beck, and Demirguc-Kunt (2005) estimate that more than 50% of low income countries comes from the informal economy, and averages nearly 30% for upper-middle income countries.<sup>4</sup> Tokman (1993) evidences that the informal sector employs about half of Latin America's urban workforce and counts for about a third of urban income. Funkhouser (1996) shows that 50% of the urban employed in Central America are in the informal sector.

For the Caribbean countries, informality has increased due to the international immigration.<sup>5</sup> Countries like Venezuela, Puerto Rico, and Dominican Republic have received international immigrants to fulfill employment needs as economies have expanded.<sup>6</sup> According to Duany (1991) this tendency would continue as long 1) as immigrants do the job that natives do not want to do; and 2) as government's subsidies for nationals increase.

Conventionally informality is synonym of outcast activity<sup>7</sup>, where poor, uneducated, and recent immigrants are easily found. Despite these criticisms research provides benefits of these activities (Maneepong & Walsh, In press).<sup>8</sup> The benefits can be direct or indirect. Among its direct benefits informality brings relative flexibility, autonomy and independence. On the indirect side, informality benefits consumers with lower prices, better assortment of products, and sometimes alternatives of payment (Bustamante et al., 2009).

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<sup>4</sup> Ayyagari et al. (2005) uses GDP to determine the classification of countries.

<sup>5</sup> Informality has been related to two separate type of immigration: internal and international (Duany, 1991). However, for Puerto Rico, one can identify international immigration (from other Caribbean economies, especially from Dominican Republic) with informality, as internal immigration is almost inexistent.

<sup>6</sup> In different countries immigrants, usually, have supplied the labor to agriculture and other urban areas. Haitians in Dominican Republic, Colombians in Venezuela, immigrants from Granada and St. Kitts in Trinidad y Tobago are some examples of these relationships (Duany, 1991).

<sup>7</sup> Informality can be associated low-productivity marginal jobs, not complying with taxes and labor regulations or social protection, or even shadow economy (Gasparini & Tornarolli, 2009).

<sup>8</sup> Maneepong & Walsh (In press) documents that after 1997 financial crisis in Thailand, a new generation of street vendors have born. Now street vendors include laid-off workers with business savvy and formal sector experience.

### **3. Role of Micro Enterprises in the Development of Countries**

The role of microenterprises in the economic and social development of countries, especially in developed countries, is well documented. Additionally, studies have concluded that there is a difference of entrepreneurial rates between countries. Stenholm, Acs, and Wuebker (2013) suggest that differences in institutional arrangements are associated with variance in both the rate and type of entrepreneurial activity across countries.<sup>9</sup>

The main contributions of microenterprises are creation of employment and wealth (Mead & Liedholm, 1998; Orlando & Pollack, 2000). Moreover, evidence shows that certain MSEs are capable of rapid growth (McPherson, 1996), MSEs survival rate is not different from larger firms (McPherson, 1992), and MSEs can be as efficient as their counterparts (Liedholm & Mead, 1987). Given these possible contributions, support for this type of enterprises has grown through time.

The World Bank believes that microenterprises might serve the role of “redistribution with growth”. The idea is to support poor producers as engines for income distribution and economic growth. In addition, microenterprises might be seen as school for entrepreneurs to manage larger industries once they “graduate” from their beginnings as micro-entrepreneurs (McPherson, 1996; Cabarroty, 1999).

On the other hand, the Inter-American Bank Development Bank believes that the economic growth and social conditions’ betterment in the Caribbean and Latin America is function of an innovative progress of the private sector which is socially responsible and

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<sup>9</sup> For innovative, new high-growth enterprises regulations do not matter as much as with replicative ventures (Stenholm et al., 2013).



integrated into the international scenario. In order to this private sector grow; entrepreneurship needs to be promoted (Vives, 2004). That is why from several years the Institution has supported different activities, such as: entrepreneurship competitions, technical assistance, trainings, investment funds, and businesses' incubators (Llisteri, 2004).

#### **4. Policy-making to foster Microenterprises**

The development of microenterprises is supported from different structures: list of donors, non-governmental organizations (such as foundations, universities, and research and training centers), and governments. On one side, governments in developing countries have the role of promoting entrepreneurship. On the other side, in the United States (US) and Canada, leaders of entrepreneurial endeavors, non-governmental organizations promote entrepreneurship. The government's task is to improve/keep conditions of the environment and infrastructure and finance new entrepreneurs (Llisteri, 2004). Not matter the root of entrepreneurship promotion in countries, research provides evidence that MSEs should be supported, since certain MSEs are capable of rapid growth (McPherson, 1996).

Puerto Rico has also embarked in efforts for developing microenterprises as mean to deal with the economic crisis. There several private and governmental organizations providing financial and educational aid to interested people:

1. Banco de Desarrollo Económico para Puerto Rico (BDEPR) - provides financing to small and medium enterprises since 1985. This organization has several financing sources for Puerto Rican entrepreneurs; see Appendix 2 for detailed description of all their financial products. (<http://www.bde.pr.gov/bdepr/index.php>)

2. Movimiento Empresarial - multi-sectoral alliance to promote SMEs for creating and retaining employment in Puerto Rico. The alliance offers an integrated program of entrepreneurial training and advising, technological recourses, and financing.  
(<http://www.movimientoempresarialpr.com/>)
3. Instituto de Comercio Exterior y Desarrollo Empresarial (ICEDE) – training program of Departamento de Desarrollo Económico y Comercio. It provides an array of courses in different areas for entrepreneurs.  
(<http://www.comercioyexportacion.com/programas/instituto-de-comercio-exterior-y-desarrollo-empresarial>)
4. Centro de Desarrollo de Pequeñas Empresas y Tecnología (SBTDC) – alliance between the Small Business Administration and Universidad Interamericana; it is located in eight centers around the Island. SBTDC provides training through courses to entrepreneurs.  
(<http://www.prsbtdc.org/prsbtdc.html>)
5. Instituto Empresarial para la Mujer - alliance between the Small Business Administration and Universidad del Sagrado Corazón since 1997. The program centers on women entrepreneurs.  
([http://www.mujeryempresas.org/cms/index.php?option=com\\_content&view=frontpage&Itemid=1](http://www.mujeryempresas.org/cms/index.php?option=com_content&view=frontpage&Itemid=1))
6. Departamento de Agricultura – offers financing to entrepreneurs in agriculture.  
(<http://www.agricultura.gobierno.pr/>)

7. Agencia Federal de Desarrollo Rural – agency of the Department of Agriculture to foster economic growth of rural areas. The agency provides training, financing and support to entrepreneurs in rural areas. (<http://www.rurdev.usda.gov/pr/>)
8. Agencia Federal para el Desarrollo de la Pequeña Empresa – federal agency that promotes SMEs.
9. Corporación para el Fomento Económico de la Capital (COFECC) – non-profit organization created in 1982 to promote the economic development of San Juan. COFECC provides funding for microenterprises. (<http://cofecc.info/>)
10. Centro de Desarrollo de Empresas Minoritarias (MBDA) – a federally funded program by the Minority Business Development Agency of the US Department of Commerce. In Puerto Rico, it is operated by the Association of Puerto Rican Products. Its principal goal is to provide technical assistance to entrepreneurs grow their businesses nationally and internationally. (<http://www.puertoricombdacenter.com/>)
11. Instituto Socio-Económico Comunitario, Inc. (INSEC) – non-profit organization created in 1985 to alleviate poverty in Puerto Rico. INSEC provides funding for viable microenterprises. (<http://www.insec.org/>)
12. Centro para Puerto Rico, Fundación Sila M. Calderón – provides training in business to citizens who want to become microentrepreneurs (Millán, 2012).
13. Alliance of Desarrollo Integral del Sur (DISUR), Corporación para Microfinanzas-Puerto Rico and Universidad del Turabo – looks to support micro entrepreneurs with limited resources that live in the southern municipalities of Puerto Rico (CyberNews, 2012).

14. Echar Pa'lante – program of Banco Popular de Puerto Rico, established in 2011, to promote community micro entrepreneurship on the Island.

(<http://www.echarpalante.com/>)

Moreover, in Puerto Rico, government has supported recently the following programs to foster entrepreneurial activity:

1. *PRIDCO's Special Marketing Fund* (August 2010) – assignment of \$1.2 millions to finance marketing campaigns of products and services from Puerto Rico (“PRIDCO anuncia incentivo de mercadeo”, 2010).
2. *Desarrollo para el Pueblo Program* (2010) – initiative to stimulate entrepreneurship and the development of small businesses in municipalities with unemployment rates greater than 20%, through training and support to interested citizens. The program’s aim was to visit 38 municipalities by June 2012 (López, 2011).
3. *Special Incentive for Marine Transportation for Exporting* (September 2011) – assignment of \$3 millions to grant incentives and special rates for exporting goods and services for four years to Florida, Panama or Dominican Republic (Martínez, 2011).
4. *Invierte en Puerto Rico Program* (June 2012) – credit lines up to \$900,000 so enterprises can meet the requirements for competing in governmental bids (Vera, 2012).
5. *Préstamo para la Mujer Emprendedora* (September 2012) – loan (up to \$15,000) to support women microenterprises (“Nuevas herramientas para la mujer empresaria”, 2012).

6. *Kioskos Pa' Mi Gente* (October 2012) – provides kiosks to unemployed citizens to establish microenterprises. The program also provides training about entrepreneurship, financial planning, and business plans (“Gobierno entrega kioskos”, 2012).

## **5. Dynamics of microenterprises**

Previous research on entry, exit, and growth of microenterprises has focused in developed countries and a couple of developing countries (due to its relatively novelty among researchers).<sup>10</sup> The existing work debates on which firms’ and proprietors’ characteristics promote growth. On one side, several characteristics of the firm might affect growth such as, size, degree of formality, location, and sector. On the other side, proprietors’ age, gender, education, experience, and access to financing might also affect the dynamics of a MSE. Empirical work on this area tend to support a negative relationship among firms’ growth and size, age, lack of education or experience, being female, lack of access to financing, and lack of formality (McPherson et al., 2010).

Mead and Liedholm (1998), Liedholm and Mead (1999), Liedholm (2002), McPherson (1995, 1996), and Goedhuys and Sleuwaegen (2000) has studied Africa on these topics (Fajnzylber, Maloney, and Montes-Rojas, 2006). According to McPherson (1996), after surveying five countries in Africa, important determinants of growth of MSEs are: level of human capital embodied in the proprietor, firm location, sector, and gender. While age and size present an inverse relationship with growth.

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<sup>10</sup> Small-firm dynamics in developing countries as a research area appeared in the late 1980s (McPherson et al., 2010).

In the Latin American scenario, McPherson and his colleagues (2010) analyzed data for Mexico, surveying 400 existing enterprises and 40 closed businesses.<sup>11</sup> Their results support previous literature on developed economies. In Mexico, firms grow slower if they are bigger, are engaged in manufacturing, lack access to capital, are owned by females, and remain informal. Similar results, also for Mexico, were found by Fajnzylber et al. (2006).

These results provides similarities between developed and developing economies, suggesting that mainstream models of worker decisions and behavior might be useful for policymaking in the latter.

## **6. Barriers and challenges to Microentrepreneurship**

According to DeBerry-Spence & Elliot (2012) literature has depicted the different barriers that micro-entrepreneurs might defeat to reach their businesses' goals. Literature has identified the following goals for micro-entrepreneurship: internationalization (exporting), market entry, business growth, innovation, and marketing. Whereas the following barriers impair those goals:<sup>12</sup>

1. Socio-cultural barriers – language, culture, and family limitations.
2. Technological barriers – access limitations to technology, both at the business and country level.
3. Psychological barriers – poor work attitudes of the owner(s), among others
4. Political barriers – governmental environment of the host country.

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<sup>11</sup> The authors included closed enterprises to control for the possibility of sample selection bias, limitations of previous empirical work.

<sup>12</sup> For a complete explanation of these barriers see DeBerry-Spence and Elliot (2012).

5. Operational barriers – imperfect operating conditions of businesses.
6. Infrastructural barriers – poor infrastructure conditions of the host country.
7. Institutional barriers – inadequate education, health care, and labor, among others in the host country.
8. Economic barriers – market deficiencies of the host country.
9. Legal barriers – legal deficiencies or inadequate enforcement of the laws.
10. Export barriers – limitations to opportunities of internalization.

In addition, to these barriers, micro-entrepreneurs might overcome everyday challenges. These challenges are problems, including events, conditions, and people that impair the ability to conduct daily business operations (DeBerry-Spence & Elliot, 2012). These challenges are characterized by frequent occurrence, disruption, and idiosyncrasy. These daily problems are important because its short and long term implications, time dedicated to these matters, and thus goal and motivation are affected.

Micro-entrepreneurs need to deal with all these impediments. The main difference between barriers and challenges is the timing effect on goals and the manners to deal with them. On one hand, barriers might limit long-term (strategic) goals and they should be removed permanently. On the other hand, challenges affect short-term goals (tactic), and entrepreneurs need to manage them on a daily base. Understanding this dual scenario would help micro-entrepreneurs to success in their businesses. Moreover, the development of educational programs should focus on how micro-entrepreneurs might deal with everyday problems so they do not transform into barriers (DeBerry-Spence & Elliot, 2012).

The World Bank Enterprise Surveys dataset also identified the key obstacles for firms worldwide. Electricity, access to finance, practices of the informal sector, tax rates, political instability, and corruption were the six most cited obstacles by small firms (Kushnir et al., 2010). Unfortunately, Puerto Rico was not considered for this analysis given the lack of data. Therefore, this area should be included in the proposed instrument.

## **7. Overview of the agricultural sector in Puerto Rico**

According to statistics of the Department of Agriculture of Puerto Rico (2011), for 2009/10, the agriculture in Puerto Rico reported a gross net income of \$822 million. Production of milk is the biggest agricultural business in the Island, accounting for 30 percent of the value of the market. However, its growth rate is negative (-0.50 percent) for the latest published statistics (2009/10 versus 2008/09). This negative trend is also reported for coffee with a decrease of 85.18 percent. Traditionally, both of these sectors have been considered as pillars of the agricultural industry in Puerto Rico, but as statistics show it seems that this is not longer true.

By contrast, the highest growth rate (1.86 percent) is presented for the farinaceous group, which includes green bananas, the second biggest agricultural business in Puerto Rico (12.69 percent of the market). The ornamental plants' sector presents the second highest growth rate of 1.15 percent. Both of these products are very common on the new free markets that are becoming popular in Puerto Rico. For example, every second and fourth weekend of every month "La Placita"(in Plaza Las Américas) offer agricultural products to customers, the same concept is also provided in Ponce every third weekend of the month. In addition, there are other venues for farmers to offer their products around the Island:



1. “Mercado Agrícola Natural”, Antigua Plaza del Mercado, Old San Juan – every Saturday from 8:00 a.m. to 1:00 p.m.
2. “Mercado Agrícola Verde Sombras” in Parque Verde Sombras, Cayey – every second Saturday of the month from 9:00 a.m to 3:00 p.m.
3. “Mercado Agrícola de Utuado” in Antigua General Cigar, Utuado – every Sunday.
4. “La Casita de Enantes” in Centro de Servicios de Mueblerías Berrios, Cidra – every Saturday and Sunday from 8:00 a.m. to 5:00 p.m.
5. “Mercado Agrícola Orgánico de Hato Rey”, Placita Roosevelt, San Juan – every first and third weekend of the month.
6. “Mercado Agroecológico de Rincón”, Plaza Pública de Rincón, Rincón - every first and third weekend of the month.
7. “Mercado Ecológico de Ponce”, Secretaría de Deportes, Ponce – every second and fourth Sunday of the month.
8. “Mercado hacia una Cultura Agroecológica”, Casa Pueblo, Adjuntas – every last Sunday of the month.
9. “Mercado Agroecológico de Aguadilla”, Proyecto La Tierra Prometida, Aguadilla – first Saturday of every month.
10. “Eco-Mercado Santa Rita”, Río Piedras – every second Saturday of the month.

Development of agriculture in Puerto Rico is not only to foster the economy and fight against unemployment, but to deal with a possible food shortage. It is estimated that more than the 80% of the food consumed in Puerto Rico is imported. Moreover, changes in the climate of the Island might produce a crisis (“Florece el agro empresarismo”, 2012). Previous

governor, Luis Fortuño, as soon as he started his administration in 2009, assigned the designated Agriculture Secretary to foster the agriculture growth. The expectation was to get some of the \$8.7 billion food market (Fajardo, 2009).

## **8. Methodology**

The definition of microenterprise is one major issue that must be determined before researching the topic given the various definitions that coexist. For this study, microenterprise, as prescribed by Law 152 (2010), is an organization with one to seven employees, with maximum annual sales of \$500,000.

The starting point of this project would be the agricultural industry. Currently, there is a great interest in promoting the agricultural sector in Puerto Rico as a possible employment and economic development routes to alleviate the actual economic crisis. There have been efforts to organize free markets during the weekends around the Island so micro entrepreneurs can sell their products (see Part #7 above for a list). Moreover, Plaza Las Americas, the biggest shopping mall in Puerto Rico, have opened a permanent place for these types of businesses, “La Placita”.

Once the instrument has been developed, it would be answered by the owners of the business operating in the free market (La Placita) in Plaza Las Americas, San Juan. Over 50 farmers sell their merchandise to the public every second and fourth weekend of every month.

“La Placita” promotes itself that includes more than 50 farmers. Therefore, the initial sample will consist of these farmers. This free market was selected first because it is the only one that operates eight days of every month. Additionally, its location is very convenient for the

researcher, as it is close to the University. If for any reason the administrators of Plaza Las Americas obstruct/prohibit the interviews, then other free market will be considered.

The businesses that would be selected must have less than seven paid employees, and should be selling one or more of the products in the farinaceous<sup>13</sup>, fruits<sup>14</sup>, vegetables<sup>15</sup>, or ornamental plants groups (as defined by the Department of Agriculture). These two groups were selected because are the ones with a positive growth rate, according to the latest available statistics of the Department of Agriculture.

The sample would be by convenience and willingness of the owners to answer the instrument. The instrument would be the guide for the interviews with these owners. The interviewer would be the one answering the instrument, and not the owner. This methodology would provide a better response rate. In addition, it would allow the interviewer to further explain any question to the participant.

Appendix 1 includes the proposed questionnaire. The survey has 71 questions divided in four areas: 1) about the business, 2) about the work on the business, 3) proprietorship's demographics, and 4) proprietorship's household demographics. The questionnaire was constructed considering all the important variables of the literature, such as demographics of the owners and businesses, finance sources, time developed to the business (full time vs. part time job), competition, goals (short and long term), level of informality, among others.

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<sup>13</sup> Farinaceous include: yams, bananas, malangas, ñames, green bananas, yautías, yucas, apio, and panapén.

<sup>14</sup> Fruits include: avocados, oranges, "cidras", coconuts, honey dew, watermelons, pineapples, papayas, mangos, and passion fruits.

<sup>15</sup> Vegetables include: pumpkin, peppers, cucumbers, cabbage, tomatoes, "gandules", and onions.

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Appendix 1  
**Cuestionario – Microempresas**

Fecha: mes \_\_\_\_\_ día \_\_\_\_\_ 20 \_\_\_\_\_

Lugar de la entrevista: \_\_\_\_\_

Día de la semana: ( ) L ( ) M ( ) W ( ) J ( ) V ( ) S ( ) D ( ) Feriado

Hora del día: ( ) 6 a.m. – 12 p.m. ( ) 12 – 6 p.m. ( ) 6 p.m. – 12 a.m.

**Sobre el negocio:**

1. ¿Es usted el dueño(a)? Sí ( ) No ( )
2. Como dueño(a), trabaja en esto principalmente: tiempo completo ( ) tiempo parcial ( )  
a. Si trabaja a tiempo parcial, ¿tiene otro trabajo? Sí ( ) No ( ), especifique \_\_\_\_\_
3. ¿Trabaja todo el año en esta empresa? Sí ( ) No ( )  
a. Sino, ¿cuántos meses del pasado año trabajó el negocio? \_\_\_\_\_ meses.
4. ¿Por cuánto tiempo ha trabajado en el negocio? \_\_\_\_\_ años.
5. ¿Que otros trabajos con paga tiene? Mencione:
6. ¿Por qué decidió emprender este negocio?

**Sobre su trabajo en este negocio:**

7. ¿Cuántas horas al mes abre? \_\_\_\_\_ horas.
8. ¿Cuántos días de la semana pasada ha trabajado? 0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 ( ) 7 ( )
9. En promedio, considerando el mes pasado ¿cuántos días de la semana ha trabajado?  
0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 ( ) 7 ( )
10. Durante la semana pasada, ha trabajado un promedio de \_\_\_\_\_ horas.
11. Durante el mes pasado, ha trabajado un promedio de \_\_\_\_\_ horas.
12. ¿Cuál fue el ingreso semanal del negocio la semana pasada?
13. En promedio, ¿cuál fue el ingreso semanal del negocio durante el mes pasado?
14. ¿Cuál sería su tasa diaria de pago?



15. Reporta algo del ingreso generado al gobierno? Sí ( ) No ( )
16. ¿Por qué abrió el negocio?
17. ¿Qué hace a una persona ser un buen operador(a) en este negocio?
18. ¿Qué busca en un empleado como dueño del negocio?
19. ¿Cuánto dinero le tomó para abrir el negocio?
20. ¿Cuánto es el valor total del inventario del negocio hoy?
21. ¿Cuántos negocios ha tenido anteriormente?
22. ¿Cuántos empleados con paga tiene?
23. ¿Cuántos empleados sin paga (por ejemplo: familiares) ayudan en el negocio?
24. Mencione las fuentes de financiamiento de su negocio:  
ahorros personales( ), ahorros familiares( ), amigos( ), préstamo de un banco comercial( ),  
préstamo de una cooperativa( ), préstamo agencia de gobierno( ), otro( ), especifique
25. ¿Tenía un plan de negocio cuando comenzó? Sí ( ) No ( )
26. ¿Cuáles son los planes futuros para el negocio?
27. Si tuviera que encontrar otro trabajo, ¿cuánto tiempo le tomaría? 1 día ( ), 2 a 5 días ( ), 1 semana ( ), 2 semanas ( ), 1 mes ( ), otro ( ) especifique
28. Comparando con el año anterior, ¿cuán bien está operando el negocio? Mucho mejor ( ), Mejor ( ), Igual ( ), Peor ( ), Mucho peor ( )
29. Comparando con los dos o tres años anteriores, ¿está hoy mejor financieramente? Sí ( ) No ( )
30. ¿Tiene todos los permisos del gobierno para operar? Sí ( ) No ( )  
a. ¿Cuánto pagó por los permisos?
31. El negocio, ¿está registrado con el gobierno? Sí ( ) No ( )
32. El negocio, ¿paga contribuciones? Sí ( ) No ( )  
a. Sino, ¿por qué no paga contribuciones? (Seleccione todas las que apliquen)  
No sé cómo se hace ( )

Otra persona pago las contribuciones por el negocio ( )

Le pago a un oficial del gobierno para no pagar contribuciones ( )

No quiero ( )

No se genera el suficiente ingreso para pagar contribuciones ( )

Otro ( ), especifique \_\_\_\_\_

33. Considerando todo el negocio, ¿esta satisfecho(a) con el negocio? Sí ( ) No ( )

34. ¿Por qué? (seleccione todas las que apliquen)

( ) Me gusta el trabajo

( ) No me gusta el trabajo

( ) Me gusta el horario

( ) No me gusta el horario

( ) Me gusta la paga

( ) No me gusta la paga

( ) No tengo un jefe(a)

( ) Es difícil

( ) Es fácil

( ) No hay otro trabajo disponible

( ) Otra razón, especifique \_\_\_\_\_

35. ¿Preferiría otro trabajo si pudiese ganar lo mismo de ahora? Sí ( ) No ( )

Si contesta que sí, especifique que trabajo \_\_\_\_\_

36. ¿Tiene alguna preparación/educación/adistramiento en..(seleccione todas las que apliquen)

( ) ciencias

( ) administración

( ) computadoras

( ) artesanía

( ) técnica, especifique

( ) ninguna

( ) otra, especifique

37. ¿Cuál es el precio de su artículo de inventario principal?

38. ¿Cuánto le cuesta?

39. ¿Cómo llega a ese precio?
40. ¿Ofrece crédito? Sí ( ) No ( )  
Si ofrece crédito: ¿cuántos clientes reciben el crédito?  
¿Cuánto vende a crédito?
41. ¿Tiene algún préstamo para el negocio? Sí ( ), pase a la pregunta #41 No ( ), pase a la pregunta #
42. ¿Qué entidad le otorgó el préstamo?
43. Propósito del préstamo:
44. Cantidad del préstamo:
45. Pago mensual:
46. Tiempo del préstamo:
47. Tasa de interés:
48. ¿Piensa que la tasa de interés actual del préstamo es? Muy baja ( ), muy alta ( ), bien ( )
49. Cantidad de préstamos anteriores con la misma entidad, si aplica.
50. ¿Se le requirió colateral para el préstamo? Sí ( ), especifique \_\_\_\_\_ No ( )
51. El dinero que utiliza para re-pagar el préstamo, ¿de dónde proviene?  
ahorros personales( ), familiares o amigos ( ), ingresos del negocio ( ), otros préstamos o deudas ( ), otro( ), especifique

**Características demográficas – Dueño (a)**

52. Edad:
53. Género: Femenino ( ), Masculino ( )
54. ¿Cuántos años fue a la escuela?
55. ¿Cuántos años trabajó como empleado?
56. ¿Tiene seguro médico? Sí ( ) No ( )

57. ¿Está pagando seguro social? Sí ( ) No ( )

58. Estatus marital

59. ¿Es la cabeza del hogar? Sí ( ) No ( )

60. Durante su carrera profesional, su padre: trabajó por cuenta propia ( ), trabajó para alguien más, no trabajó ( )

61. Profesión del padre:

62. Durante su carrera profesional, su madre: trabajó por cuenta propia ( ), trabajó para alguien más, no trabajó ( )

63. Profesión de la madre:

64. Nacionalidad:

#### **Características demográficas – Hogar**

65. Número de niños menores de 12 años que vivan en su hogar:

66. Número de adultos mayores de 12 años que vivan en su hogar (incluyéndolo a usted):

67. Número de cuartos en su hogar:

68. ¿Es dueño de su hogar? Sí ( ) No ( )

69. ¿Cuál fue el ingreso semanal de su hogar de la semana pasada?

70. En promedio, ¿Cuál fue el ingreso semanal de su hogar el mes pasado?

71. Indique la situación de salud de su hogar (escoja una alternativa):

No tenemos recursos para comprar medicinas o recibir cuidados médicos ( )

Solo en casos de emergencias obtenemos recursos para comprar medicinas o recibir cuidados médicos ( )

Ocasionalmente tenemos recursos para comprar medicinas o recibir cuidados médicos ( )

Tenemos los recursos necesarios para comprar medicinas o recibir cuidados médicos ( )

Appendix 2

**Banco de Desarrollo Economico para Puerto Rico – Financial Aids**

<b>Name</b>	<b>Description</b>	<b>Amount of Credit</b>	<b>Purposes</b>	<b>Term</b>	<b>Collateral</b>	<b>Interest Rate</b>	<b>Entrepreneur's Required Contribution</b>
Préstamo Directo	SMEs	Up to \$5M	Purchase of property and inventory or working capital funds.	From 5 to 30 years depending on the purpose of the loan.	Optional, decided case by case.	Preferential rate plus a margin.	Yes
Nuevos Empresarios	1 <sup>st</sup> time male entrepreneurs	Up to \$500K	Financing of the project.	From 5 to 30 years depending on the purpose of the loan.	Yes	Preferential rate plus a margin, not exceeding 1%.	Yes
Mujer Empresaria	Female entrepreneurs	Up to \$500K	Financing of the project.	From 5 to 30 years depending on the purpose of the loan.	Yes	Preferential rate plus a margin, not exceeding 1%.	Yes
Creditransporte	Taxi drivers, tourism vehicles, and public transportation	From \$25K to \$60K	Purchase of vehicle	36 to 72 months.	Yes	Preferential rate plus a margin.	Yes
Centro de Cuidos	Day care centers	From \$50K to \$300K	Financing of the project.	From 5 to 30 years depending on the purpose of the loan.	Yes	Preferential rate, revised every 5 years.	Yes
Adquisición de equipos de emergencia	SMEs	Up to \$100K	Purchase of emergency equipment.	Up to 7 years	Yes	Preferential rate plus a margin, not exceeding 2%.	Depends on the principal of the loan.
Línea de crédito para organizaciones sin fines de lucro	Non-profit organizations	Up to \$500K	Working capital	Up to 1 year		Preferential rate plus a margin, not exceeding 2%.	

Línea de crédito para contratistas federales	Contractors participating in federal programs through PRIDCO	\$50K to \$750K	Working capital	Up to 1 year	Yes	Preferential rate plus a 2% margin, minimum 8%.	Yes
Pymexporta	Exporting SMEs	\$50K to \$750K	Working capital	Up to 1 year	Yes	Preferential rate plus a 2% margin, minimum 8%.	Yes
Préstamo universitario	Recent college graduates	Up to \$35K	Purchase of property and inventory or working capital funds.	7 years	Yes	7%	
Préstamos ALFA	Inmates that approve certain training.	From \$500 - \$2,500	Working capital	3 to 5 years	Optional, decided case by case.	Preferential rate plus a 2% margin, minimum 7%.	No
ProSalud	Health professionals	Up to \$400K	Purchase of property and inventory or working capital funds.	From 1 to 30 years depending on the purpose of the loan.	Optional, decided case by case.	Preferential rate plus a 2% margin, minimum 7%.	Yes
DesarrolloArte	Artists	Up to \$50K	Purchase of property and inventory or working capital funds.	From 1 to 7 years depending on the purpose of the loan.	Yes	Preferential rate plus a 2% margin, minimum 7%.	Yes
Mujer y Joven Agro-empresario	Women or young agricultural entrepreneurs	Up to \$5M	Purchase of property and inventory or working capital	From 1 to 30 years depending on the purpose of	Yes	Preferential rate plus a margin.	Depends on the principal of the loan.

			funds.	the loan.			
Financiamiento de Crédito Agrícola	Small and medium farmer	Up to \$5M	Purchase of property and inventory or working capital funds.	From 1 to 30 years depending on the purpose of the loan.	Yes	Preferential rate plus a margin.	Depends on the principal of the loan.
Reemplazo Lechero	Stockbreeder	Up to \$70K	Cows	3 to 42 months.	Yes	Preferential rate plus a 2% margin, minimum 7%.	