

# HOW TO DO ENTREPRENEURSHIP PROGRAMS IN MEXICO: WHICH BENEFICIARIES, SUPPORT PACKAGES AND PROJECTS?

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## ABSTRACT

*The operation of numerous entrepreneurship programs in Mexico underlines that it has become a major, albeit fragmented, public policy. The article analyses a poverty-alleviation-through-entrepreneurship program in the State of Guanajuato and asks: Who should entrepreneurship programs support: the poorest or the most prepared among them? With what support packages and for which type of projects? An initial case study evaluation via a questionnaire applied to beneficiaries widened to an analysis of national entrepreneurship policy and a literature survey of international best practice. It found that in allowing self-selection, the program missed its vulnerable target population in marginalized communities and assisted less poor but more educated young adults in towns.*

*However, it got lucky, because although the program only included funding, highly motivated, capable beneficiaries established modestly viable projects at low per-project cost to the authorities. So where public sector departmental resources are scarce and spread across programs and municipalities, such interventions can enable relatively poor but well-educated beneficiaries, in different sectors and stages of start-up, to self-select into a program which includes an initial project design procedure and a monitoring help-line to tackle evolving problems with externally contracted coaches. But if the objective is to support vulnerable beneficiary profiles or technology-based innovations, programs will need to delegate beneficiary selection, training and mentoring to specialized partners at much higher per-project cost.*

*Generalizing from this experience, governments need to make a very conscious initial choice between two approaches for their entrepreneurship programs: 1) The minimalist in-house cash-only program which, via an initial project design process, selects educated, albeit poor beneficiaries to reap quicker, broader but shallower impacts and 2) The resource-intensive, integrated program with external partners, implementing genuine targeting to achieve significant if smaller-scale reductions of extreme poverty or economic development through innovation, depending on the program orientation and objectives.*

**Keywords:** Entrepreneurship, Evaluation Program, Mexico Poverty, Project Targeting.

## INTRODUCTION

The research team were given the task of evaluating the *Programa Impulso a la Economía Social Sustentable* or *PIESS* (which translates as Program for Building a Social and Sustainable Economy), version 2012, implemented by the *Secretaría de Desarrollo Social y Humano (SEDSHU)* of the Guanajuato Government (a landlocked state in central Mexican). The three aspects analyzed were the design and application of the program and the perception of the beneficiaries concerning its impact on household welfare and employment (Team *UGTO*, 2015,

*CONCYTEG*, 2015). The study commenced as a third-year impact review of the program but evolved into an analysis of Mexican entrepreneurship policy within the context of international best practice (Heald et al, 2015). In many ways the *PIESS* is a specific case of a widespread Mexican practice, considering that Cardenas-Elizalde et al. (2014) of the *Consejo Nacional de Evaluacion de la Politica de Desarrollo Social (CONEVAL*, the federal evaluation agency), edited a review of the operational rules, reports and independent audits of 273 federal entrepreneurship programs and another 120 at state level. These programs were implemented by numerous organizations, both public and civil, between 2009 and 2012, using non-reimbursable grants or soft microloans.

Considering Mexican entrepreneurship programs as a whole, one could ask the question: Who, among the poor, should the government support, the poorest? that is to say, in 2012, the 6.9% of the Guanajuato state population classified as extremely poor: Or the better qualified among them?, in other words, the more educated among the 37.6% who are moderately poor (*SEDESHU*, 2014). All the editions of the program (2012–2018) in their operating rules prioritized the most vulnerable households, with the objective of improving welfare through self-employment, although in practice, the typical beneficiary has rarely been the poorest (*SEDESHU*, 2012). Questioning who the ideal recipient is begs the following questions: What support package should be provided? and for Which projects or businesses (Heald et al., 2015).

These questions are important considering the government budget allocated to entrepreneurship. The 273 federal programs analyzed by Cardenas et al. (2014); absorbed 18 thousand million pesos (1,385 million dollars at a 2012 exchange rate of 13 pesos per dollar), financing 877,000 projects, which represented 5% of Mexican public expenditure on social development, excluding education, health and social security (Munoz Soria, 2012). This article makes recommendations for programs like the *PIESS* by contextualizing the Mexican entrepreneurship experience with respect to international best practice, rather than doing the standard comparison of a selection of local programs which tend to replicate operational strengths and weaknesses, the product of a shared public-sector program culture.

The article establishes the research objectives and questions in the introduction. As a guide for program evaluation criteria, Table 1 refers to Best Practice which discusses state-of-the-art training materials available for project design, presents a list of the most successful features of entrepreneurship programs world-wide, considers the efficacious application of training to the booming social enterprise sector and briefly analyses focalization and innovation policies. Contextualizing the *PIESS* program within the Mexican setting, Table 1 also refers to Public Policy which outlines thirty years of development policy and divulges international recommendations concerning Mexican entrepreneurship programs. It furthermore profiles Mexican entrepreneurs, assesses their business start-up environment and identifies the key program types and institutions responsible for them. It also queries the effectiveness of the Latin-American Social or Solidarity Economy perspective as a vehicle for promoting entrepreneurship. *PIESS* Evaluation describes antecedents and operational features of the *PIESS*, outlines the research design, examines program impact and makes recommendations to better identify, coach, connect, fund, innovate, include, celebrate and enable entrepreneurs and their start-ups. The Conclusions make recommendations for the *PIESS* and similar programs concerning target populations, support packages and project types most deserving of support, identifying in the process two approaches to entrepreneurship support packages—the minimalist and the integrated - which require very different resource availabilities. Finally, the Annex presents the summary statistics of fieldwork interviews.

<b>Best Practice</b>	<b>Public Policy</b>
<b>Instruments</b> for up-to-date business models rather than the obsolescing traditional business plan	<b>Development Model</b> evolution from centralized state planning to decentralized entrepreneurship
<b>Interventions</b> as programs inspired in the “Entrepreneurial Toolkit” and “Good Practices” frameworks	<b>Entrepreneurs</b> and their profiles as young men and women in similar proportions, providing principally personal services and petty commerce
<b>Social Entrepreneurship</b> using proven business model instruments for successful provision	<b>Environment</b> for doing business, which is heavy on regulation and expensive concerning private credit
<b>Targeting</b> end-user profiles, according to poverty, gender and ethnicity focus	<b>Programs</b> at federal, state and municipal level, offering a profusion of both integrated and minimalist intervention packages
<b>Innovation</b> as an option for high impact business and technology projects	<b>Economic solidarity</b> as a Latin American vehicle for entrepreneurship which is strong on social capital but weak on business acumen

Source: Own compilation

## LITERATURE REVIEW

### Best Practice

**Instruments:** The traditional desk-written business plan, built on unsubstantiated hypotheses which fail in the market, is being updated. Shortcomings include conceptualizing a start-up as a small version of an established company complete with a departmental organigram and five-year pro-forma financial statements originally designed to report results rather than anticipate future positions, which relegates to a category of intangibles the most important assets of a modern business, namely the ability of its work force, the close relationship it enjoys with its clients and its capacity to innovate (Lange et al., 2006). As a result, from the beginning of the millennium, a group of innovators from Silicon Valley in the USA and elsewhere have revolutionized the practice of entrepreneurship by designing thoroughly tested business models which can be adapted for use in the social sector. These include iteration processes, Minimum Viable Products, for-profit and social sector Canvasses, Pitch Decks and investor designed Executive Summaries (Akina Foundation, 2016; Blank, 2003 and 2017; Gust, 2017; Kawasaki, 2004; Osterwalder & Pigneur, 2010 and 2014; Ries, 2011). The outcome is a toolbox of instruments for designing private and social enterprises, appropriately specifying the “*Value Proposition*” offered to clients and users, and as a result the probability of start-up success.

**Interventions:** In the private sector, the “*jockey*” or entrepreneur is often considered more important than the “horse” (or project) which means the emphasis is on developing people before their projects, which in any case undergo numerous transformations before hitting on successful formulas. Training courses are widely available in many countries (including México) for different sectors of the population through educational institutions and training consultancies (Bygrave & Zacharakis, 2014). There are “*Start-Up Bootcamps*”, often subsidized, which teach young cohorts how to generate a business idea during intensive weekend sessions. More substantial are “*Incubators*” and “*Accelerators*” which offer training and mentoring, generally on-site although also digitally. The accelerators represent an evolution on the incubator model, with competitive entry formats, project groups instead of “*Lone wolfs*” and fast-track completion

via graduation pitches, which may even bring the accelerator owners onboard as shareholders of the projects they mentor (Barrehag et al., 2012; D'School, 2017).

In the development sector, there may not be a definitive blueprint for the ideal entrepreneurship program, however, there are experiences which come close to defining one. The “*Entrepreneurship Toolkit*” is the result of the compilation of the most successful experiences of the “*Global Entrepreneurship Program*” (GEP) and “*Business Growth Initiative*” (BGI) which support initiatives implemented by USAID at international level (Bohoney, 2011). The Toolkit establishes six pillars of good practice which are: 1) identify entrepreneurs to work with, starting with the selection or auto-selection of beneficiaries, which in turn, depends on program priorities, which might focus on the creation of self-employment in vulnerable communities or integrated business support for innovative creators whose enterprises (known as gazelles) have rapid growth potential; 2) train, because many entrepreneurs lack certain skills or knowledge which circumscribes their progress; 3) connect, because entrepreneurship works better by building relationships with coaches and contacts in an open market ecosystem; 4) fund, because it is important to hook-up entrepreneurs with credit institutions; 5) enable, because entrepreneurs work better in hospitable institutional environments with respect to the law (property rights, contract compliance), economics (social and transport infrastructure) and culture (social acceptance of risk-taking and wealth accumulation), and; 6) celebrate, in order to shine a spotlight on successful projects, create consciousness of the role of entrepreneurship and encourage demonstration effects (Bohoney, 2011; GEP, 2011). The “*Good Practices*” used by IFAD (Boateng, 2001) embraces a framework for interventions, organized in similar pillars to the “*Toolkit*” (Boateng, 2001).

**Social entrepreneurship:** Internationally there has been a boom in social entrepreneurship, which some business schools advocate through virtual courses (or MOOCs), successfully using adaptations of for-profit tools such as Canvases and Pitch Decks to build projects and programs (Copenhagen Business School, 2017, Wharton Social Entrepreneurship, 2017). There are for-profit enterprises which commit heavily to Social Responsibility as part of their mission and there are not-for-profit enterprises which fund community and other social programs via donations from private benefactors, companies, governments and the public in general, for example via crowdfunding platforms. (Kickstarter, 2017; Mair & Noboa, 2003; Social Stock Exchange Association, 2016). Social enterprises may have low financial profitability, but their complex operations promote socially desirable activities. Essential to these initiatives is the generation of funding and capacity building through the creation of sponsorships, which is why many of them use the business techniques presented in Best Practice–Instruments, and exchange ideas and experiences through collaborative international networks, such as the “*Global Social Entrepreneurship Network*” (GSEN, 2017) and the “*Unreasonable Institute*” (2017). Social entrepreneurship is mentioned here as an alternative to more traditional civil association development models, because it exemplifies entrepreneurship best practice, bearing in mind the rural development tradition in Mexico and elsewhere in Latin America which favors Solidarity Economy for building social capital rather than business viability (refer to Public Policy-Solidarity Economy).

**Targeting:** Social programs sometimes specialize according to the needs of different groups afflicted with poverty, such as women (refer to *PRONAFIM*, 2018 and *INADEM*, 2018), or young people, for example, the *PIESS* itself, or more unusually, the handicapped (refer to the

*Asociacion Espanola de Emprendedores con Descapacidad* or AEEDI, 2018) in Spain, or the elderly (Kantor, 2001; ILO, 2011, IMUG, 2018). Alternatively, programs can be inclusive and actively support diverse profiles, which include women and men, rural and urban (Bauer, 2011, Boateng, 2011, Kantor, 2001; ILO, 2011; WED, 2017). The question of empowerment through entrepreneurship training is important for disadvantaged groups which have limited access to education (Balcazar et al., 2014; Naude, 2010).

**Innovation:** There are numerous clusters of small manufacturers in Guanajuato State and throughout Mexico (INEGI, 2017) in traditional industries such as leather and shoes, furniture, apparel, ceramics and decorative craft products; however, a common denominator is a deficiency in technology and marketing skills. Unlike countries such as South Korea, Taiwan and China, whose entrepreneurs have established manufacturing in computers, cellular telephones, etc., small manufacturing firms in Latin American often avoid technology and operate antiquated production systems (Alvarez & Barney, 2014). Vicens & Grullon (2011) suggest the need to formulate business models around their founders with an emphasis on accelerating progress through the transfer of innovation and technology using managed creative communications networks of entrepreneurs, technicians, scientists, universities and companies. They cite the experiences of Stanford University with Silicon Valley, USA, amongst others. There have been regional Latin American initiatives, the most successful probably being public-private initiatives in Chile in which the government development agency *CORFO*, *Fundacion Chile* and Start-Up Chile, have managed to create new clusters in farming and food, notably wine production and salmon farming. However, there is little evidence of a particularly successful regional approach to innovation which could be replicated throughout the continent (Ferrero & Stump, 2010; Rivas, 2014; Vicens & Grullon, 2011).

## METHODOLOGY

### Public Policy

**Development model:** The Mexican federal government abandoned the economic development model based on government-led sectorial planning for an open market export orientation, evidenced by Mexico's entry into international agreements like the General Agreement on Tariffs and Trade (GATT) in 1986 and the North American Free Trade Agreement (NAFTA) in 1994. Following the debt-crisis decade of the 1980s, nationalized industries were privatized, except energy and petrochemicals, and direct foreign investment in international production chains was encouraged, taking advantage of the long northern border with the USA. It was anticipated that competition would spur national companies to modernize and up-date their technology. An early consequence of globalization was an increase in imports and a deterioration in local productive systems with initially negative effects on employment and purchasing power.

With the backing of the business sector, since the beginning of the millennium Mexican development policy has focused on entrepreneurship as a means of generating employment and incomes. The Law for the Development of the Competitiveness of Micro, Small and Medium Enterprises (abbreviated to *MiPymes*), formalized the strategy in 2002, which was to be coordinated by an inter-governmental National Council for *MiPyme* Competitiveness. In practice, the Economics Secretariat coordinates policy through sexennial national development plans, although eight other secretariats are also involved, including those for agriculture, social development and tourism. In its strategic framework, it recognises five enterprise types (new,

micro, small-medium, gazelles and tractors) and five intervention types (financing, training and consultancy services, management, marketing and commercialization, and, innovation and technology development). From 2007 onwards, the Secretariat has organized its activities through five cross-cutting programs, one for each of the enterprise types (OECD, 213).

In practice, other secretariats at federal, state and municipal level organize their programs rather differently, which makes for a policy patchwork. An early evaluation of Mexican entrepreneurship public policy by the Economic Commission for Latin America and the Caribbean (ECLA), reiterated recommendations, initially made in a study by the Organization for Economic Cooperation and Development (OECD) in 2006, which are: 1) a revision of public expenditure to identify those programs which have most impact on *MiPyME* effectiveness; 2) improved coordination between programs; 3) training of state and local authorities to enable them to absorb federal initiatives more effectively; 4) improved diffusion of policies among Mexican business groups; and 5) systemic evaluations not just of the number of projects financed, but also including impact metrics (Ferrero & Stumpo 2010).

More recent criticism by the OECD (2013) has centered on: 1) the lack of an integrated, high-level policy statement on entrepreneurship, including the absence of action lines for program design and operation, and a lack of linkage between entrepreneurship and innovation policy, which the National Council mentioned above never provided; 2) the highly fragmented delivery of over 600 intermediary organizations including universities and technical institutes, business chambers and associations, labour unions, state and municipal governments, civil associations, financial trusts, non-bank financial institutions, commercial banks, public agencies and trusts, local civil associations and federal funds supporting science and technology, rural development and exporting; 3) the low priority afforded to innovation and technology, and 4) an archaic government funding system which is annual instead of multi-annual, which stymies continuity and forward planning (OECD, 2013).

**Entrepreneurs:** Mexican entrepreneurs are generally between 25 and 44 years old, men and women in similar proportions, have completed a high school education and earn average incomes. They generally are not poor and do not need their start-up to survive (GEM, 2015, Naranjo & Campos, 2013, Naranjo & Campos, 2014). They take advantage of local circumstances, develop opportunities which they spot in a professional context or turn a hobby into an enterprise (Alvarez & Barney, 2014). Their growth ambitions are modest, only 1.5% of them expect to expand their businesses to employ 20 or more staff, and few have international aspirations (GEM, 2015). Early-Stage Entrepreneurial Activity (TEA), recorded by the Global Entrepreneurship Monitor (GEM) and which registers start-ups of between three months and 3.5 years of productive activity, has increased from 9.6% of the adult population in 2011 to 21% in 2015, possibly assisted by the burgeoning number of public entrepreneurship and credit programs. On the other hand the percentage of the adult Mexican population running established firms (operational for more than three years) was 4.5% in 2011, rising to 6.4% in 2015 (Bygrave & Zacharakis, 2014; GEM, 2015; GEM, 2016; Levie et al., 2014). Mexican entrepreneurs offer personalized services or are involved in small-scale commerce as Table 2 reveals.

According to GEM, 80% cent of nascent entrepreneurs set up in small-scale consumer services (food stalls, hair salons and shops) which do not offer much potential for creating development clusters (Naranjo et al., 2016). Numerically, micro and small enterprise make up a large majority of Mexican firms in all sectors, but their contribution to employment and value-added in manufacturing is limited. It has been suggested that Mexico's entrepreneurship policy

should more actively support small-scale manufacturing (Rivas, 2014; Szirmai, 2011; Vicens & Grullon, 2011).

<b>Sector</b>		<b>Micro</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Manufactures</b>	# employees	0-10	11-50	51-250	251+
	% Firms	93.6	4.2	1.5	0.7
	% Employment	20.8	8.8	16.8	53.6
	% GDP	2.7	4.7	15.7	76.6
<b>Services</b>	# employees	0-10	11-50	51-100	100+
	% Firms	95.3	3.9	0.4	0.4
	% Employment	43.1	16.5	5.1	35.4
	% GDP	22.4	17.5	6.8	55.3
<b>Commerce</b>	# employees	0-10	11-30	31-100	100+
	% Firms	96.9	2.2	0.7	0.3
	% Employment	60.5	11.7	12	15.9
	% GDP	27.1	19.8	15.9	29.3

Source: Own compilation, based on mini-monographs of micro, small, medium y large firms, Economic Census, 2014, INEGI.

**Environment:** The diagnosis of the Mexican business environment in Doing Business (World Bank Group, 2017) classified Mexico relatively well in position 39 out of 189 countries. Mexico enjoys a relatively open market, however, there are areas of opportunity in categories of permits and payments in which the country scores badly, as evidenced in Table 3.

<b>Business Environment</b>	<b>2017 (ranking of 190 countries)</b>	<b>2015 (ranking of 189 countries)</b>
<b>Ease of doing business</b>	<b>39</b>	<b>49</b>
Starting a business	67	90
Dealing with construction permits	108	87
Getting electricity	116	92
Registering property	110	99
Getting credit	12	6
Protecting minority investors	62	62
Paying taxes	105	115
Trading across borders	44	63
Enforcing contracts	57	41
Resolving insolvency	27	31

Source: Doing Business, 2015 and 2017, World Bank Group.

Though credit is available through banks, credit unions (*Cajas Populares* in Spanish) and government programs, a combination of inadequate earnings or collateral, complex administrative procedures and high average annual interest rates of between 60 and 80% may explain why only 27% of the Mexican population used some form of institutionalized credit in 2012. In the same year and employing a breakdown for size of municipality, the use of formal credit reduced to 17% in municipalities with less than 15,000 inhabitants. On the other hand, 34% of Mexicans were using informal credit characterized by even higher interest rates offered by individual lenders (*agiotistas* in Spanish), or were participating in local savings groups known as *tandas*. (Cardenas et al., 2014). More recently, microcredit programs, offered by diverse institutional formats, appear to have proliferated in a lax regulatory environment, offering generally small, high-interest loans to a diverse cross-section of Mexican society with many

beneficiaries gaining access to multiple, concurrent loans, a high proportion of which appear to be non-performing (Rozas, 2018; Triple Jump, 2018).

**Programs:** In Mexico there are two common versions of entrepreneurship programs. The first supports “*Productive projects*”, frequently group-based, in rural areas or in the poor peripheries of urban areas, which provide for family consumption with the sale of surpluses in local markets. Federally supported projects legally require integration within a cooperative or civil society operational framework. They use non-reimbursable grants to enable the consolidation of cohesive project groups with an emphasis on solidarity. Field staff from government agencies and civil society organizations such as cooperatives or civil associations generally emphasize social capital formation through participative meetings but unfortunately offer less support in the areas of production engineering and marketing. For federal programs refer to: *INAES (social economy secretariat)*, *SAGARPA (farming secretariat)* and *SEDESOL (wellbeing secretariat)* and for state level programs in State of Guanajuato refer to: *DIF (family development institute)* *IMUG (women’s institute)* and *SEDESHU (social development)* (all in the bibliography). The second program profile supports “*Business plans*”, generally individual, which make products or services for profit, predominantly in urban areas in which the government has regional offices. Administered by government agencies, decentralized business or civic associations, they offer technical and marketing advice, and concessionary loans with grace periods, preferential interest rates and zero required collateral. They often operate loans through commercial banks and oblige beneficiaries to sign up with a registered incubator. For federal programs, refer to: *Fondo Pyme (for small and medium sized enterprises)*, *INADEM (entrepreneurship institute)* and *Nacional Financiera (development bank)*. For state level programs in Guanajuato, refer to *SDES (economic development secretariat)* and *decentralized microcredit agencies ADMIC*, and *Microcredito Santa Fe* (all in the bibliography).

A minimalist approach offering basically non-reimbursable funds is common to state and municipal programs operated by traditional secretariats with limited, overstretched and under specialized staff, however federal agencies and decentralized state programs generally operate integrated program strategies which includes funding, project design, training and periodic monitoring.

**Solidarity economy:** A social development paradigm prevalent in Mexico and throughout Latin America is *Economia Solidaria* or *Social* defined as “*A collection of agents which organize themselves in cooperative associations and foundations, in which the general interest takes priority over individual interests, and decision-making is participative*” (Zona, 2017). Accordingly, several “*Capitals*” are combined such as social capital (social fabric), human capital (above all capabilities, skills and health), physical capital (productive assets, including biological ones), among others, to enable community-based “*Productive projects*” in rural areas or poor neighborhoods of towns (Heald, 2012, Website of *Economia Solidaria*, 2017). Training concentrates on fortifying community solidarity groups, which can be a foundation for “*Productive projects*”, but it is insufficient if it omits the formulating of a business model centered on the needs of potential clients with a marketing strategy or overlooks the budgeting of inputs bought from outside the community. The *Economia Solidarity* approach is a consequence of the rural or social development background of rural development fieldworkers, but it can lead to dilemmas such as the depletion of animal stocks due to a lack of husbandry skills or the high costs of veterinary services, and the accumulation of craft product stocks which producers cannot sell for want of a marketing strategy. “*Productive projects*” can lose their direction after an initial



wave of enthusiasm, with part of the support package ending up in the hands of suppliers rather than as a benefit for the community (Heald, 2012). The Solidarity Economy model can perhaps circumvent these problems by adopting the business model tools described in Best Practice-Instruments which are widely used in the social enterprise approach (refer to Best Practice-Social Entrepreneurship).

## RESULTS AND DISCUSSION

### PIESS Evaluation

<b>The PIESS</b>	Morphed into a self-selecting, funding-only, predominantly urban, multi-sector, minimalist, state support program, in its 2011 onwards reincarnation, contrasting with its integrated, Solidarity Economy civil society implemented origins in 2000 in rural, food self-sufficiency.
<b>Research design</b>	Detailed survey questionnaire applied to over 20% of original recipients through participating municipalities.
<b>Impact</b>	Moderately successful due to self-selection by well-educated young people principally from the numerous municipal “capitals”, and discussed according to beneficiary profile, sector participation, motivation, managerial competency, employment, investment and turnover and profit.

Source: Own compilation

### The PIESS

As Table 4 summarizes, The *PIESS* follows a trajectory of entrepreneurship programs offered by the *SEDESHU* of the Guanajuato State government. The first version of the program was introduced between 2000 and 2002 as *Economia Solidaria*, (refer to Public Policy-Solidarity Economy), changing its name to *PRODEMI* (*Programa de Desarrollo Microregional* or Micro-Regional Development) between 2003 and 2004, and to the abbreviated acronym *DEMI* in 2005, before being phased out in 2006. During this initial period, the program went through a metamorphosis, starting life within the Solidarity Economy paradigm, with the support of a civil society friendly governor and rural development specialists within the *SEDESHU* who invited civil associations with experience of community development, to execute the program within their sub-regional operating areas. The program explicitly supported “productive projects” (refer to Public Policy-Programs) namely backyard gardens, farming, processing of agricultural produce and community provision of bread and *tortilla*. The initial emphasis was on social capital and community building, but by 2005 the civil associations had been replaced with public sector field workers, and the program justification became a loosely defined microregional development program through productive projects.

The recent incarnation of the program, as the *PIESS*, began in 2011 and was phased out at the end of the six-year state government 2012-2018. Unlike its predecessor, it operated without an explicit philosophical or development paradigm such as Solidarity Economy. Via yearly requests- for proposals, it simply provided non-reimbursable cash through the *SEDESHU*'s main office in the state capital to individual beneficiaries to support “*Productive projects*” or “*Business plans*” (refer to Public Policy-Programs) in any sector excluding farming. In 2012, the program provided 25,000 pesos (1,900 US dollars at a 2012 exchange rate of 13 pesos per dollar) for “*Productive projects*” and double that amount i.e. 50,000 pesos for “*Business plans*”. Eligibility criteria supposedly identified an objective population who were poor, vulnerable and under the age of 30, who presented the approved format for either “*Productive projects*” or “*Business*

*plans*". From 2013 onwards, the program included a commitment to support projects in the areas of innovation and technology but did not explain how. There was also a "Once-only" beneficiary rule for participants and program funding was annual, which meant that the operating rules were modified on an annual base, all of which impaired program continuity.

## Research Design

To reveal design and implementation features as well as beneficiary perceptions and program impacts of the *PIESS* 2012, a detailed but mainly closed questionnaire format was applied to a representative sample of 107 beneficiaries (out of 529 original recipients) on their business premises, three years after receiving the support package as required in the research protocol, respecting proportionality with regards to sex, geographical spread and rurality. The descriptive statistical results are presented in the Annex and together with Best Practice and Public Policy reviews, form the basis for recommendations made in *PIESS* Evaluation. Unfortunately, correlations between individual question results are not significant enough to warrant more sophisticated statistical analysis. The research team corroborated the coherence of the findings with previous experiences of evaluating local government entrepreneurship programs (*Economía Solidaria*, *PRODEMI* and *DEMI*—refer to Public Policy-Programs).

## Impact

Concerning beneficiary profile, the program allowed a group of young beneficiaries with an average age of 28 (standard deviation of 3) to self-select with a bias towards men (57% of beneficiaries) and urban areas (81%). With three quarters of participants educated up to local university or technical college level, nearly half had received business training previously, though less so the women. The typical program beneficiary is similar to the national entrepreneur profile (refer to Public Policy-Entrepreneurs) which is a consequence of the self-selection of program participants, although the under 30 age criterion does appear to have been generally respected (refer to *PIESS* Evaluation-The *PIESS*), but not the condition of poverty or vulnerability, which illustrates what can happen when targeting fails (refer to Best Practice-Targeting). However, none of the beneficiaries received training through the program, which only offered non-reimbursable grants.

Concerning sector participation, most start-ups were in services (43%) and commerce (20%), although over 20% of women and rural-based beneficiaries opted for food preparation. Only 8% of projects were in manufacturing (12% of men owned projects), which suggests low technology and growth potential and is very much in line with the national start-up picture (refer to Public Policy-Entrepreneurs). Only 27% of projects collaborated productively with their suppliers, nor were their owners' members of business associations, so there is little evidence of the formation of clusters, which has been identified as a requisite for successful industrialization (refer to Best Practice-Innovation).

Concerning motivation, over 90% of participants were thinking of taking up entrepreneurship anyway, though slightly less in rural areas, and nearly 60% had already started-up in some shape or form before joining the program. The financial support offered by the program was vital for the 41.5% of clients (and up to 50% in rural areas) who "wouldn't have started (WHS) if not for the support received. Over 80% of projects contacted by the evaluation team were still operating three years after receiving the support (and remember many projects were already operating in some shape or form beforehand), although only 75% of those in rural

areas. That however underestimates the true mortality rate as projects simply disappeared in the absence of official monitoring, some probably stillborn or worse, fraudulently inexistent, at the start of the program.

Concerning managerial competency, 20% of beneficiaries changed their project idea during start-up and 30% afterwards, indicating that projects were not appropriately designed using training materials (refer to Best Practice-Instruments before launching). Interestingly, the absence of monitoring also means that the official project applications in their “productive projects” and “business plans” formats were never reviewed or improved. Two thirds of those interviewed did book-keeping and had identified strategies for improving profitability, while three quarters intended to expand their business. 60% of beneficiaries found out about the program through the internet, although fewer set up a business web page and fewer still in rural areas where internet is unavailable. Two thirds of the businesses were registered for tax purposes, but only half of those in rural areas.

Concerning employment, the projects engaged their owners virtually full time on an average of 35 hours a week. They also created an additional 1.3 full-time jobs and 1.4 part-time jobs, generally for family members.

Concerning investment, a large majority of projects co-invested at the beginning and reinvested later, with an average co-investment of \$42,800 pesos, followed by an average reinvestment of \$79,200 pesos, respectively, although rural and WHS projects invested less, which suggests that the non-reimbursable aspect of the support was appreciated by motivated beneficiaries rather than abused by free riders. Only 11% of projects obtained additional external funding suggesting that alternative private and public-sector credit options were not considered viable, a long-term national problem identified in the entrepreneurship literature (Public Policy-Environment).

Concerning turnover and profit, experiences were highly variable, with an average monthly expenditure of \$10,000 (standard deviation of 15,000) pesos, the projects obtained \$20,000 (s.d. 25,000) pesos in sales, resulting in net earnings of \$10,000 (s.d. 30,000) pesos per month, which means that some projects were profitable while others made losses. Men owned and urban located projects self-reported higher turnover and were more profitable than women owned, rural and WHS (refer to above) projects. Most business owners reported that their businesses were somewhat profitable and had contributed to household well-being but overall a quarter of projects were either breaking even (15%) or making a loss (10%).

## RECOMMENDATIONS

Proposed program improvements are discussed using the pillars of best or good practice suggested in the Entrepreneurship Toolkit (USAID) and in Rural Enterprise Growth and Development (IFAD) (refer to Best Practice-Interventions) (Boateng, 2001; Bohoney, 2011).

Identify: As already mentioned program beneficiaries self-selected, which is a respectable strategy, but not the one the program specified, and would have required an eligibility procedure undertaken by program staff (refer to *PIESS* Evaluation-Impact). That begs the question of whether beneficiaries should self-select or be identified according to the objectives of the program and perceived needs of the target population (Boateng, 2001; Bohoney, 2011). Self-selection has the big advantage of attracting viable projects, but also beneficiaries with higher levels of education, networking and business skills, and adeptness at accessing advice, additional funding, etc. The poorest, on the other hand, are unlikely to meet the entry requirement of a written document, (Public Policy-Programs), unless supported by program staff at the beginning

of the process. It requires resource intensive interventions to identify suitable beneficiaries and improve project design and execution during the start-up process, which local government departments pass over due to human resource limitations.

**Coach:** The *PIESS* offered neither training nor coaching (refer to *PIESS* Evaluation-Impact) but required the completion of an application format containing a “*Productive project*” or “*Business plan*” which was subsequently ignored. A more effective strategy would be to include workshops for all candidates using the business model design tools presented in Best Practice-Instruments, perhaps including some essential features of Boot Camps (refer to Best Practice-Interventions), to generate Canvases to improve initial proposals. This should ensure that a solution to a problem is identified, a need is attended, or an opportunity is exploited in a Minimum Viable Product with a well-defined Value Proposition for customers and end-users (Barrehag et al., 2012; Blank, 2003; D’School, 2017; Kawasaki, 2004; Osterwalder & Pigneur, 2008). Participants with less education need more on-site training in production engineering, cost accounting and marketing, above all those located in rural areas or who identify as WHS profiles (refer to *PIESS* Evaluation-Impact). The program would need to determine which training should be on-site, virtual or delegated to a directory of education institutions and business consultancies (Bohoney, 2011). Considering the large variety of project types from different sectors (services, commerce, and to a lesser extent, manufacturing), no in-house training service could attend a host of specific sectoral needs, however, all program participants should receive a short, basic training in entrepreneurship to improve their initial project design (refer to Best Practice-Instruments).

**Connect:** The *PIESS* ignored the need to create networks, however the young beneficiaries, thanks to their education, personal drive, connections and access to information and other resources managed to establish and strengthen their businesses, though not so much in rural areas. The program organizers could have used a web-based gateway to enable beneficiaries to access training and market intelligence materials and a directory of independent coaches, by sector and municipality (Boateng, 2001). Beneficiaries also need to be connected to each other, through social networks and periodic meetings at municipal or regional level to foment the exchange of ideas and create group solidarity (refer to Best Practice-Interventions and Celebrate below) (Bohoney, 2011). A program like the *PIESS* should establish a system of monitoring and evaluation with periodic visits to identify emerging problems during project start-up (Boateng, 2001). It can also spot fraudulent, none-existent projects at the beginning and improve subsequent editions of the program (refer to Public Policy-Development Model) (Ferrero & Stumpo 2010).

**Fund:** It is questionable whether programs should fund projects with non-reimbursable grants instead of pay-back credit, however almost all the *PIESS* businesses invested their own resources at the outset and further down the line as well, so there was limited funding abuse. It is also difficult to start-up projects successfully using the small credits with high interest rates available in the market and (refer to Public Policy-Environment and also Programs). Furthermore, research picked up a positive correlation between initial co-investment, reinvestment, expenditure, sales and net earnings, which means that funding is fundamental. On the other hand, the rigidity of the annual accounting process, together with the “once-only” beneficiary rule, means that the program support package is delivered on a single date with little or no follow-up (refer to *PIESS* Evaluation-The *PIESS*). Program effectiveness requires setting up a multi-year system of funding and mentoring to enable the consolidation of projects through the initial stages of the project life cycle by attending problems as they emerge (refer to Public Policy-Development Model) (Boateng, 2001).

**Innovate:** The *PIESS* supported the start-up of personalized and small-scale commerce with low growth potential (refer to Best Practice-Innovation) with a dearth of manufacturing reminiscent of the national tendency (refer to Public Policy-Entrepreneurs) (GEM, 2015, Naranjo and Campos, 2013, Naranjo and Campos, 2014). There was consequently limited supply chain development and collaboration with other businesses, blunting the potential for the growth of clusters (refer to *PIESS* Evaluation-Impact). From 2013 onwards, the *PIESS* was supposed to foment projects with innovation and technology, but that requires involving technology institutions, plus a mechanism to enable the graduation of successful innovations to other, more specialized small enterprise innovation programs at federal level (refer to Best Practice-Innovation) (Rivas, 2014; Vicens & Grullon, 2011).

**Include:** The *PIESS* ensured that 100% of funding was for young people, however it ignored its poverty remit and if it were revived with a mandate to target, it would need to define the participation of beneficiaries in the following categories: 1) no prior experience in setting-up projects and business; 2) resident in poor neighborhoods and rural areas 3) low education attainment; and 4) vulnerable young people, women and handicapped. If it were to attend vulnerable groups, customized packages should be implemented according to beneficiary profiles and needs regarding training and coaching, which requires hiring external institutions with experience in special needs groups (refer to Best Practice-Targeting) (Boateng, 2001, Kantor, 2001, Naranjo & Campos, 2014, ILO, 2011; WED, 2017).

**Celebrate:** The *PIESS* enabled the creation of start-up projects considering the 41.5% of beneficiaries in the WHS category. The projects fomented earnings, employment and well-being. However, the government generated no information or statistics concerning success stories or program impact, at state or municipal level. If it were to continue, it should celebrate success stories to motivate participation, evidence program impact and guarantee future funding. An award ceremony could be an opportunity for beneficiaries, businesses and civil-associations to network (refer to Best Practice-Interventions and Connect above) (Bohoney, 2011).

**Enable:** Fomenting a business-friendly environment belongs to national public policy formulation, however it merits comment. Funding institutions should simplify access to formal sector credit even though numerous options already exist and, where pertinent, seek to keep interest rates at an accessible level (refer to Public Policy-Environment). It requires simplifying complicated program processes, formats and paperwork. Putting in place one-stop-solutions for entrepreneurship program information and application procedures can reduce dysfunctional bureaucratic practices (Naranjo & Campos, 2014). Deepening anti-monopoly reforms has also been suggested as an across-the-board economic stimulation policy which could encourage entrepreneurship (Naranjo & Campos, 2014).

## CONCLUSION

Answering the three questions raised in the introduction and summarized as intervention models in Table 5 (see below), the first question is: Who should entrepreneurship programs support? The poorest or profiles with superior capacity and training even when they are less poor, with a view to amplifying impact? From an operational view, the best advice is to keep things simple if the program and institutional framework does not have the human resource capacity to reach, identify, train, design, develop and coach entrepreneurs and their projects. Beneficiaries can be encouraged to self-select and access non-reimbursable funds or credit, with initial monitoring to ensure resources are honestly solicited and invested, with impacts and success stories reported later. Such a program requires more limited, arms-length engagement with less

intensive funding because of strong co-investment by beneficiaries. More educated participants can flourish in minimalist, low cost per-project programs especially if and where information and coaching advice is available through externally contracted consultants. This would be the justification for a program like the *PIESS*, although it is debatable whether most of its beneficiary base cannot finance themselves out of larger federal programs which use commercial bank networks to administer credit on preferential terms rather than the non-reimbursable grants provided by the *PIESS*.

However, women were underrepresented in the *PIESS* beneficiary list and the discreet results of rural beneficiaries and the “*Wouldn't have started if it wasn't for the support*” category suggests that more remote locations and vulnerable groups require coaching to design and execute projects which meet customer needs and connect to markets (Banerjee & Duflo, 2011; Maksimov et al., 2017; Vial & Hanoteau, 2015). The poor, rural and ethnic minorities are the members of Mexican society who have least opportunity of finding employment in the formal sector and possess fewer alternatives for sustaining their families and diversifying their incomes. They are also the profile which is least likely to respond to invitations to participate in programs, especially where written applications are required. Concerning the *PIESS* objectives, there is a justifiable case for targeting considering the State's record of poverty, however a minimalist *PIESS* type program strategy is inappropriate for the most vulnerable members of the community who require an integrated intervention.

Concerning the second question: What support package should be offered? The importance of channeling differentiated support packages to different beneficiary profiles has already been mentioned. The more educated profiles can benefit from coaching offered in decentralized and even virtual formats while the poorest require on-site support in areas such as production engineering, administration and marketing. “*Productive projects*” for family groups and communities of the Solidarity Economy variety (refer to Public Policy) can be precursors for more business-orientated programs. If the objective is household consumption with the local sale of surpluses, basic notions of cost-benefit should also be introduced to avoid the extensive use of inputs and services from outside the community which creates indebtedness. For programs with an entrepreneurial emphasis, the old-fashioned desk-compiled “business plan” needs replacing using a modern toolbox which identifies the needs of potential clients, defines and test products and services before bringing them to market (refer to Best Practice-Instruments). This toolbox has been used to create both private and social enterprises all over the world and adapted to local conditions (Blank, 2003; Copenhagen Business School, 2017; Felix et al., 2017; Kawasaki, 2015; Mauyra, 2013; Murphy, 2014; Osterwalder & Pigneur, 2008; Ries, 2011). However, no program should use a “*Productive project*” or “*Business plan*” format as an entry requirement to be subsequently discarded as was the case with the *PIESS*. All programs should include a revision and iteration-based improvement of an initial project idea facilitated by entrepreneurship trainers to increase the probability of start-up success (refer to Best Practice-Interventions).

With respect to the third question: Which projects are most worthy of support? Science and technology entrepreneurship excluded, the appropriate response is to support a wide range of projects from different sectors because the economy benefits from offering a variety of products and services, avoiding systemic risks of overly supporting one sector or discriminating against others. Filtering out projects and sectors easily becomes an exercise in arbitrariness, as does, for example, excluding projects because they are already work-in-progress and so do not meet a capricious criterion of being complete start-ups. Instead, a major emphasis should be placed on correctly identifying customer needs in initial project design. In the context of the State of

Guanajuato, it would appear logical to include important clusters in traditional sectors such as ceramics, furniture, decoration, clothing, leather goods and food processing.

In subsequent editions of the *PIESS* (from 2013 onwards), program objectives included promoting innovative projects with technology, which is surely misplaced in a social development context, as it requires differentiated support packages provided by external, specialist partners and infrastructure in engineering and science, with generous funding to cover elevated per-project costs. The case in favor of targeting innovation should come from a government department involved in science and technology, rather than the *SEDESHU* (refer to Best Practice-Innovation). However, where social sector programs identify promising innovations, there needs to be a protocol for transferring them to a technology-based program (Rivas, 2014, Vicens & Grullon 2011).

<b>Who?</b>	Very poor and vulnerable	Most capable among the poor. Educated, potentially less poor	Most capable among the poor. Educated, potentially less poor. Highly innovative
<b>What support package?</b>	Integrated package: identify, coach, connect, fund, include, celebrate, enable	Minimalist: fund, access to information and coaching via internet	Integrated package: identify, coach, connect, fund, innovate, enable
<b>Which projects?</b>	All sectors. Upgrading traditional sectors and clusters. No prior experience	All sectors. Upgrading traditional sectors and clusters. Prior experience helpful	Innovation. Prior experience
<b>How</b>	Targeted in communities	No targeting with self-selection from High school upwards	Targeted in science initiatives

Source: Own compilation

Proposing a general rule, where public administration and human resources are limited and stretched, the most realistic entrepreneurship support strategy is to go shallow and wide with a low per-project budget program reaching numerous participants. It can allow the self-selection of beneficiaries and limit expert advice exclusively to project design prior to funding, perhaps with an on-line coaching service, and further down the line communicate impacts and successes. The *PIESS* Evaluation reveals that initial project impacts in self-selection programs evaluated three years after start-up can be significant, although long-term, success in low-tech, highly competitive service and retail sector projects would appear to be far from guaranteed and should be the subject of subsequent research. Where program objectives target specific beneficiary profiles such as the extremely poor or innovators, the intervention package needs to be differentiated according to profile with important elements delegated to expert external partners, at much higher per-project cost.

As a final comment, entrepreneurship project mortality is high across sectors, programs and institutional formats. So, entrepreneurship should form part of a general education within the Mexican national education curriculum at secondary and tertiary level, because it is an essential aptitude both for start-ups and established companies and institutions in knowledge-based societies. Whether that offers a better return on public resources invested is an interesting subject for further research (Brainard et al., 2005; Bygrave & Zacharakis, 2014; Gamez & Garzon, 2017; GEM, 2015; Levie et al., 2014; Maritz & Brown, 2012; Naranjo & Campos, 2014).

## APPENDIX–BENEFICIARY QUESTIONNAIRE STATISTICAL SUMMARY

BENEFICIARY POPULATION PIESS 2012										
Beneficiaries in 40 out of 46 municipalities	Men	Women	Leon	Irapuato	Celaya	Dolores Hidalgo	Salamanca	Salvatierra	34 other municipalities	
529	315	214	130	56	52	35	26	23	207	
PIESS Type of support	Productive Projects	Business Plans	Period during which resources delivered							
Fund for investment	\$25,000	\$50,000	July to December 2012							

SAMPLE						
Number of interviews	Men	Women	% beneficiaries sampled	Period of application		Simple random sampling, representative with a margin of error of $\pm 4.3\%$ .
107	61	46	20.23	July and August, 2015		
Location	Total	Men	Women	Age	Mean	Stan. Dev.
All beneficiaries	100.00%	56.19%	43.81%	All beneficiaries	27.75	3.26
Urban	80.95%	45.71%	35.24%	Urban	28.15	3.17
Rural	19.05%	10.48%	8.57%	Rural	26.20	3.24

EDUCATION, TRAINING, COACHING							
Level of education?	Up to age 12-14	Up to age 15-17	Degree	Master	PhD	Technical	
All	5.71%	10.48%	67.62%	5.72%	0.95%	9.52%	
Have you ever received training or coaching for starting up a business?	No	Yes	% training?	% consulting			
All	47.62%	52.38%	40.95%	11.43%			
Men	53.33%	46.67%	36.67%	10.00%			
Women	40.00%	60.00%	46.67%	13.33%			

PROGRAM ADMINISTRATIVE PROCESSES							
Who told you about the program?	Official publication	Word of mouth	Functionary	Other			
All	55.14%	28.97%	13.08%	2.80%			
Rural	75.00%	15.00%	10.00%	0.00%			
Source of information?	Internet	Poster	Radio	Newspaper	Functionary	Other	
All	59.70%	13.43%	8.96%	1.49%	1.49%	14.93%	
Did anyone encourage	Nobody	family	friend	State	Municipal	Other	



<b>you?</b>				<b>functionary</b>	<b>functionary</b>	
All	42.16%	23.53%	20.59%	1.96%	3.92%	7.84%
<b>The attention given to you was...?</b>	<b>Very good</b>	<b>Good</b>	<b>Average</b>	<b>Awful</b>		
All	42.68%	53.66%	2.44%	1.22%		
<b>The administrative procedure was...?</b>	<b>Very easy</b>	<b>Easy</b>	<b>Complicated</b>	<b>Very complicated</b>		
All	11.54%	59.62%	25.96%	2.88%		
<b>The delivery assistance was...?</b>	<b>Very easy</b>	<b>Easy</b>	<b>Complicated</b>	<b>Very complicated</b>		
All	20.00%	68.57%	9.52%	1.91%		
<b>Did you receive the full support package?</b>	<b>Yes</b>	<b>No</b>		<b>Were there delays?</b>	<b>Yes</b>	<b>No</b>
All	97.20%	2.80%		All	10.28%	89.72%
<b>Did you receive visits for auditing purposes?</b>	<b>Yes</b>	<b>No</b>				
All	19.60%	80.40%				

<b>PERSONAL EXPERIENCE OF SETTING UP BUSINESS</b>						
<b>Were you thinking of starting-up a business?</b>	<b>Yes</b>	<b>No</b>		<b>Did you change your business idea during the launch?</b>	<b>Yes</b>	<b>No</b>
All	91.59%	8.41%		All	20.56%	79.44%
Rural	85.00%	15.00%		Rural	15.00%	85.00%
<b>Was the support package vital to you setting-up?</b>	<b>Yes, I wouldn't have started up otherwise (WHS)*</b>	<b>No, I would have started up anyway</b>	<b>No, but it would have been smaller</b>			
All	41.51%	49.06%	9.43%			
Rural	50.00%	40.00%	10.00%			

<b>BUSINESS OPERATION</b>						
<b>Were you operating before you received the support package?</b>	<b>Yes</b>	<b>No</b>		<b>How long have you been operating?</b>	<b>Years</b>	
All	43.93%	56.07%		All	4.04	
WHS*	20.45%	79.55%		WHS*	2.77	
<b>Have you changed your line of business since starting up?</b>	<b>Yes</b>	<b>No</b>		<b>Are you still operating?</b>	<b>Yes</b>	<b>No</b>
All	28.57%	71.43%		All	82.24%	17.76%
Rural	10.00%	90.00%		Rural	75.00%	25.00%
<b>Sector</b>	<b>Services</b>	<b>Commerce</b>	<b>Food</b>	<b>Industrial</b>	<b>Farming</b>	<b>Other</b>
All	42.55%	20.21%	15.96%	8.51%	1.06%	11.70%
Men	45.10%	21.57%	9.80%	11.76%	1.96%	9.80%
Women	39.53%	18.60%	23.26%	4.65%	0.00%	13.95%
Urban	41.89%	14.86%	20.27%	9.46%	0.00%	13.51%
Rural	42.11%	21.05%	21.05%	5.26%	5.26%	5.26%

WHS*	43.24%	24.32%	18.92%	5.41%	0.00%	8.11%
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<b>PRODUCTION AND SALES</b>						
<b>Is anything preventing you operating better?</b>	<b>Yes</b>	<b>No</b>				
All	92.31%	7.69%				
<b>How many months of stock do you keep</b>	<b>None</b>	<b>1 month</b>	<b>2 months</b>	<b>3 or more months</b>		
All	57.83%	26.51%	9.64%	6.02%		
<b>Do you have too much stock?</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Completely agree</b>		
All	53.25%	35.06%	5.19%	6.49%		
<b>Do you have established suppliers?</b>	<b>Yes</b>	<b>No</b>	<b>Do you have supplier deals?</b>		<b>Yes</b>	<b>No</b>
All	71.57%	28.43%	All		52.44%	47.56%
WHS*	64.29%	35.71%	WHS*		41.94%	58.06%
<b>What were your monthly expenses?</b>	<b>Mean</b>	<b>Stan. Dev.</b>	<b>Monthly sales?</b>		<b>Mean</b>	<b>Stan. dev.</b>
All	\$10,205	\$15,372	All		\$19,356	\$24,888
Men	\$10,943	\$14,779	Men		\$22,349	\$26,404
Women	\$9,471	\$16,357	Women		\$16,068	\$22,552
Urban	\$10,974	\$16,327	Urban		\$21,299	\$26,364
Rural	\$7,594	\$10,883	Rural		\$13,639	\$17,952
WHS*	\$5,806	\$10,263	WHS*		\$10,039	\$15,205
<b>Monthly earnings (sales – expenses)?</b>	<b>Mean</b>	<b>Stan. Dev.</b>	<b>Do you measure customer satisfaction?</b>		<b>Yes</b>	<b>No</b>
All	\$9,151	\$29,253	All		50.98%	49.02%
Men	\$11,406	\$30,258	<b>Do you have a web page?</b>		<b>Yes</b>	<b>No</b>
Women	\$6,597	\$27,860	All		30.10%	69.90%
Urban	\$10,325	\$31,010	Rural		15.00%	85.00%
Rural	\$6,045	\$20,993	WHS*			
WHS*	\$4,233	\$18,345				

<b>INVESTMENT AND FINANCE</b>						
<b>Did you invest your own money?</b>	<b>Yes</b>	<b>No</b>				
All	87.63%	12.37%				
<b>Amount of own money invested</b>	<b>Mean</b>	<b>Stan. Dev.</b>	<b>Did you reinvest your own money</b>		<b>Yes</b>	<b>No</b>
All	\$42,762	\$80,587	All		82.86%	17.14%
Men	\$52,339	\$93,637	<b>Amount reinvested</b>		<b>Mean</b>	<b>Stan. Dev</b>
Women	\$25,804	\$42,644	All		\$79,196	\$161,608
Urban	\$47,619	\$87,864	Men		\$87,640	\$118,068
Rural	\$21,857	\$24,387	Women		\$69,970	\$209,540
WHS*	\$18,243	\$20,825	Urban		\$87,968	\$178,954
<b>Have you received other funding?</b>	<b>Yes</b>	<b>No</b>	Rural		\$47,400	\$42,995
All	10.68%	89.32%	WHS*		\$52,197	\$38,248

<b>WORK AND LABOUR</b>						
<b>Do you work by yourself?</b>	<b>Yes</b>	<b>No</b>		<b>How many hours do you work?</b>	<b>Mean</b>	<b>Stan. Dev.</b>
All	39.22%	60.78%		All	34.62hrs.	22.80hrs.
<b>How many full-time staff work with you?</b>	<b>Mean</b>			<b>How many part-time staff work with you</b>	<b>Mean</b>	
All	1.30 staff			All	1.36 staff	
<b>How many family members work with you?</b>	<b>Mean</b>					
All	0.97 staff					

<b>ESTRATEGY</b>						
<b>¿Do you register your sales and expenses (do bookkeeping)?</b>	<b>Yes</b>	<b>No</b>		<b>Do you plan to expand your business?</b>	<b>Yes</b>	<b>No</b>
All	68.27%	31.73%		All	73.79%	26.21%
<b>Do you have ideas about how to make your business more profitable?</b>	<b>Yes</b>	<b>No</b>		<b>Do you belong to a business association?</b>	<b>Si</b>	<b>No</b>
All	67.31%	32.69%		All	12.37%	87.63%
<b>Do you collaborate with other businesses?</b>	<b>Yes</b>	<b>No</b>		Rural	0.00%	100.00%
All	26.92%	73.08%		WHS*	05.26%	94.74%
Rural	15.00%	85.00%		<b>Are you registered with the tax authorities?</b>	<b>Yes</b>	<b>NO</b>
				All	67.00%	33.00%
				Rural	47.37%	52.63%

<b>PROFITABILITY OF YOUR BUSINESS</b>						
<b>Is your business profitable?</b>	<b>Very profitable</b>	<b>Somewhat profitable</b>	<b>Breaks even</b>	<b>Light losses</b>	<b>Big losses</b>	
All	13.59%	60.20%	16.50%	6.80%	2.91%	

<b>IMPACT ON WELFARE</b>					
<b>Have you noticed an improvement in your wellbeing...?</b>	<b>Large</b>	<b>Some</b>	<b>Small</b>	<b>None</b>	
All	6.00%	53.00%	34.00%	7.00%	

\*WHS – Wouldn't have started-up otherwise (i.e. without the support package)

There are significant correlations, although not generally high, between expenses, sales, earnings, initial investment, reinvestments, book keeping, and intention to expand business. While these correlations are real, they are not strong enough to warrant further statistical or econometric analysis.

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