

ARE ENTREPRENEURSHIP INSTRUCTORS REALLY ENTREPRENEURIALS? A JORDANIAN PERSPECTIVE

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ABSTRACT

The aim of this study is to prove practically in the emergent economies that success could be achieved by combining academic education and entrepreneurship. This study is a brief feasibility study prepared by a team of full time private Jordanian university lecturers and considered entrepreneurial whom used their knowledge in teaching entrepreneurship and small business mandatory courses with their creative thinking to propose and implement a new of its kind and successful project in the region, to produce hay from palm fronds trees, combined with an experienced agricultural engineer who holds a master degree in marketing.

This team has the necessary diverse features recommended by many studies considering that Entrepreneurship Education (EE) programs in Jordan is moving towards the planned direction however, more effort needed to transform it from theoretical to application.

The author hopes this study would be a model study to combine teaching experience in the field of entrepreneurship with the passion to succeed in the business world.

Keywords: Entrepreneurship Education (EE), Entrepreneurs Features, Feasibility Study, Jordan.

INTRODUCTION

The great management thinker Peter Drucker famously said: “*It’s not magic, it’s not mysterious and it has nothing to do with genes. It’s a discipline, and like any other discipline it can be learned*” (Drucker, 1985).

According to the Oxford English Dictionary, the entrepreneur is the one who “*Initiates a project or work with an opportunity for profit or loss.*” It must be emphasized that entrepreneurship has since been linked with the founding of new and small businesses. The owners of this project believe that there is an interesting entrepreneurial opportunity to produce the hay from date palm fronds. So a real, thoughtful business plan is needed.

Jordan as one of the developing countries is promoting entrepreneurship to improve self-employment among youth. Recently, many universities provide specific subject of entrepreneurship and innovation which is mandatory course for all streams to encourage the entrepreneurship attitude. But university learning no longer hold the promise of jobs for young Jordanian as tenth of thousands of them battle to find work.

One of the most common challenges for entrepreneurship programs in any academic institution is to answer the question: How instructors can provide students with a meaningful entrepreneurial knowledge without having the suitable entrepreneurial skills and experience in order students launch their own venture successfully? There is paucity in studies dealing with this important issue which is deemed among the most important justifications of the current study.

This study examines the Jordanian entrepreneurial education environment considering the nature of the relationship between educator’s entrepreneur features and the success of

entrepreneurial projects, especially in the developing countries where the entrepreneurial research is limited (Coder et al., 2017; Hyder & Lussier, 2016). A growing number of universities offer courses and programs in entrepreneurship, hoping this issue will be of interest to both the academia and researchers as well as government and policy makers in different parts of the world engaged in entrepreneurship and innovation. Also, for students to see what the issues are and to engage with entrepreneurs pursuing business ideas similar to their own.

The author believes that such study will add value to existing knowledge on entrepreneurship and enable educators and universities to design and improve curriculum and course delivery emphasizing competencies and skills that can improve EE to equip them so they can deal effectively with difficult business environments, and facing the challenging life which is increasingly full of uncertainties and complexities (Saji & Nair, 2018), noting that the literature is full of studies claiming that business schools are not providing what is required to prepare students correctly (Muff, 2012).

LITERATURE REVIEW

In the last few decades, entrepreneurship activities continue to grow all over the world, where new business was traditionally triggered by necessity, but now entrepreneurship is triggered by opportunity (Cheyre, 2018). Many scholars relate the entrepreneur with different characteristics and behaviors such as innovation, risk taking, build small business and leading it to the success (Abdulwahab & Al-Damen, 2015).

Kotelnikov (2010) suggests initiative, creativity, risk-taking, and responsibility to be the main features for the entrepreneurship), but said that the number one characteristic shared by successful entrepreneurs is the passion for the business. Al-Shaikkh et al. (2009) suggest initiative, risk taking, independence, innovation and creativity, self-confidence, planning, building relationships with others and take advantage of opportunities. Others agreed that entrepreneurs not only have a vision but able to theorize and implement business plans and also has an inspirational mind-set (Rahim, et al., 2015). Successful entrepreneurs are often described as tenacious, passionate, flexible, and natural risk-takers (Robinson, 2014). A joint Harvard-MIT study estimated that angel-funded firms have a greater chance of survival and typically outperform their non-angel-funded counterparts (Kerr, et al., 2010). Even if an entrepreneur possesses all of these character qualities, a successful business venture requires a viable business concept and a realistic plan, so in the next part a complete and brief business plan will be introduced for the proposed project.

EE seeks to prepare people, especially youth, to be responsible, enterprising individuals who become entrepreneurs or entrepreneurial thinkers and who contribute to economic development and sustainable communities (Fatoki, 2014). The aim for this type of education not only to promote students' entrepreneurial behaviour, skills, competences and intentions, but also to increase students' understanding of entrepreneurship and its role in society since future entrepreneurs can be found amongst those who are currently undergoing their educational process at the universities that is why EE is considered one of the most effective ways to promote the transition of graduates into the world of entrepreneurship (Ismail et al., 2009; Ramírez-Pérez, et al., 2015; Assudani & Kilbourne, 2015). It was asserted that if the objective of the (EE) is to increase the understanding a good choice will be to provide the information using lectures and seminars. In the other hand, if the goal is to provide the students with entrepreneurial skills, then industrial training is suggested (Gibb, 1999) or work-related learning and action-learning (Smith, 2001) are also suggested. Hämäläinen et al. (2018) argued that

school principals have a central role in managing and guiding the development of schools to establish new entrepreneurial practices. Also, school leaders are in significant role by accepting, enabling and promoting the (EE) practices in their school.

It was argued that risk taker educators are essential for success, because this will motivate students to be entrepreneurial. Kuratko added, it is important to inspire entrepreneurship educators that have the same innovative drive expected from entrepreneurship students (Kuratko, 2011). Some entrepreneurs fail because of doubt and fear, so they hesitate to take some risks involved in the business, at the end most of them will regret not taking the steps to give it a try much more than giving it a try and finding out it wasn't the business for them right now. We hope that this paper will encourage students to think practically and have the courage to go for it.

European Commission (2013) performed a comprehensive 91 study from 23 countries to identify (EE) impact on individuals, institutions, the economy and society. From this database, only 13 examples were selected for case studies. The results showed that students participating in EE are more likely to start their own business and they tend to be more innovative and successful than those led by person without EE.

Basu et al. (2014) explored entrepreneurial intentions and their antecedents among 123 students at San Jose State University. Findings highlight the impact of education and practical exposure to entrepreneurship on entrepreneurial intentions. Najim et al. (2014) asserted that entrepreneur characteristics (personal, managerial and organizational) have a statistically significant impact on performance profitability, ability to meet obligations, ability to expand, reputation, and relationships with stakeholders. The results of Omet et al. (2015) study also confirmed that gender and fear of failure are significant factors in impacting entrepreneurship in Jordan. Lilischkism et al. (2015) used the case study approach to investigate the innovative (EE) practices at European universities and concluded that these programs should be operated by or involve enthusiast individuals and educators should act entrepreneurially.

A factor analysis has been performed by Mehtap et al. (2017), the results indicated that a strong supportive education system to some extent may reduce the perception of potential barriers for entrepreneurship, but the overall impact can be limited. Surprisingly (Al-harathi, 2017) during the process of becoming entrepreneurs, they had found support in their religious faith, but that their schooling had a very limited influence on their experience.

“The Global Entrepreneurship Monitor cites three barriers to entrepreneurship: social and cultural barriers, lack of capital, and lack of education (Rideout & Gray, 2013)”

If a community is going to leverage entrepreneurship, education should provide a platform to create new social and cultural realities. Success will largely depend on the design of the program to enable students to develop an attitude of inquiry and curiosity that will empower them; nevertheless, successful (EE) depends on program activity as Saji & Nair (2018) study concluded (McGuigan, 2016).

The dynamic capabilities in risky environment are considered critical factor to influence the performance of small firms (Bin Hashim, et al., 2018). Grimmer also said that the performance of a small firm can be influenced by various strategic factors, but most importantly, the entrepreneurial competencies. Grimmer et al. (2017) others added the dynamic capabilities, which are important to boost firm performance (Agyapong & Acquah, 2016; Wang et al. 2015). Similarly, Tehseen & Ramayah, (2015) claim that the success of any business is dependent upon a few pivotal resources of which entrepreneurial competencies are the most crucial and intangible. Wahga et al. (2015) but Bill Aulet, head of the MIT Entrepreneurship Center, points

out from his experience and travels; it is perfectly possible to create entrepreneurial vibrancy without a single top-500 university in the vicinity, primarily because the innate characteristics and hardiness of the population lend themselves to business endeavors and entrepreneurial behavior (Naqvi, 2012).

Abu-Rumman (2019) explored the extent to which Jordanian universities had become entrepreneurial and examined the knowledge management factors which are most important in making this transition. The study used an online anonymous survey to gather the views and perceptions of university academic staff about the entrepreneurial maturity of their own institutions. The findings indicate that these universities are progressing toward becoming an Entrepreneurial but facing a number of barriers to adapt to the environment changes and having the proper managerial and governance arrangements, orient its activities towards an entrepreneurial culture.

METHODOLOGY AND DATA COLLECTION

The main characteristic of case study research approach is that it allows in-depth, more detailed appreciation of complex issues; events or phenomena of interest, beside this approach are widely used in business and social sciences. Both secondary and primary data were used to fulfill the purpose of this study. Secondary data were collected from Jordanian Department of Statistics of Jordan, journals, books, thesis, dissertations, working papers, and the World Wide Web. Primary data was collected by appropriate representative sample of cattle farm owners to identify their feed needs, their current sources of supply, the purchase costs and willingness to purchase the products of the project, in addition to the information provided from the investors.

FEASIBILITY STUDY FOR THE PRODUCTION OF HAY FROM PALM FRONDS TREES

According to Department of statistics in Jordan (DOS) there were significant increases in the area planted with palm trees to 32 thousand acres in 2017 compared to about 16 thousand acres in 2007, the number of palm trees reached to 500 thousands (DOS, 2018). A feasibility study will enable to estimate the financial, human and technological resources that will be needed to ensure the successful launching of the business, and serves as a filter, screening out ideas that lack potential for building a successful business, before an entrepreneur commits the necessary resources for building a plan and will help to determine the amount of capital required to start the business. It will also help in establishing the budget plan, working capital and cash flow projections of the business. Project report may have the following information:

Feeding Livestock Sector

Cattle breeding are one of the main components of the livestock sector for two reasons: the first being the main source of fresh milk production, the second being that the cattle sector comes second in terms of the value of investment after the poultry sector in Jordan.

Cattle sheep and poultry play an important role in livestock production projects in Jordan through the quantities of nutrients to save its life which called preservative food and any other type that turns inside the animal's body into production in multiple shapes which may contain organic and inorganic compounds substances. These substances may not contain a lot of nutrients compounds as much as filling the animal's stomach and giving a sense of satiety to

make digestion processes happen naturally especially in ruminants that feed on specific materials such as hay, stubble and straw, so the value of nutrients depends not only on its chemical composition but also on its mechanical interaction. The region suffers from a shortage of locally produced fodder and poultry, which is considered a major obstacle in the development of this sector. It is estimated that about 70% of the total value of livestock production requirements in Jordan.

Economy in Brief

In its “*2019 Global Economic Prospects*” report, the World Bank indicated that Jordan’s economy is expected to achieve a growth rate of 2.4% in 2020 and 2.7% in 2021. The World Bank indicated that Jordan’s jobs tend to be labor-intensive and low skilled. In another report of 2019’s projections, the economy is expected to grow by 2.3%, but with the population growth rate remaining around 2.9% annually, and no major upcoming economic developments, unemployment and poverty are expected to remain high. According to Al-Shehadeh, Jordanian minister of agriculture, the agriculture sector contribute about 30% of GDP in 2018 which means that the importance of this sector will continue to grow in increasing rates compared with other economic sectors (Al-Shehadeh, 2019).

Fodder Sources in Jordan (Green fodder)

Clovers are considered one of the main fodder crops, but only limited areas are cultivated. The other type is Filling Dry Fodder which includes tampon such as wheat, barley, lentils and kernels, and other agricultural residues. Non-traditional sources include: Grazing fields after harvest, residues of field crops harvesting and vegetables, residues of slaughterhouses, food factories, grain mills (bran).

Jordan also relies on Fodder Imports for providing the majority of its need for feed and fodder. The private sector imports soybeans, maize, feed concentrates of animal and plant origin, various animal and vegetable powders and feed additives, which are incorporated into the feed mix, also it imports hay, straw, and clover. From the above, it is found that the need for the local market of fodder, whether concentrated, dry or green is covered by the pastures lands and the local production which forms small part, the deficit is covered by the quantities imported from abroad. The establishment of any project for the production of fodder of any kind will inevitably increase the self-sufficiency, provide food for animals, and reduce the trade balance deficit by reducing the imports.

Introduction to the Project

The growth of the livestock sector in Jordan requires the availability of good quality fodder with suitable cost, so this project aims to benefit from the remnants of palm farms in Jordan, especially the palm trees accumulated in large quantities. This entrepreneurial project can benefit the owners of palm farms, the environment, the community and livestock breeders, and provide an alternative product to the importer and contributes to overcoming the scarcity of fodder and hay products in Jordan.

Product Description

It was estimated that the Arab countries possess 70% of the 120 million world's date palms and are responsible for 67% of the global date production (El-Juhany, 2010). Frond is the name of the palm leaf, where the frond length of 3-6 meters depending on the type and age of the tree and the surrounding environmental conditions, a palm in one year, produces between 10 - 20 fronds and the total fronds in a green palm tree head are 30-150 ones. The frond remains alive for 3-7 years, and then it dries and loses the green color and dangles. The typical frond is an elaborate structure composed of several parts, which are the wicks or leaflets that are spread over the rachis. They are 100-150 cm long and their width is 1-6 cm, there are 120-140 leaflets in one frond. The frond has spines located in the area extending from the wicker and the petiole base, may be up to 24 cm and thickness of 10 cm, it is arranged on the contrast on the outside of the fronds and the number is between 10 and 60 spines. The third part of the frond is the fibrosis, which is usually at the base of the frond and is composed of white connective tissue with vascular belts. As the frond grows, the white connective tissue disappears, leaving the dry, vascular bundles of the coarse fibers surrounding the stem.

The process of pruning is to remove the old frond, which is older than 3 years. Date palm trees produce 10-30 fronds annually, depends on category and the level of the service operations. The same number is dried when palm growth is completed; requiring annual removal. The single palm tree produces between 50-100 kg/year. It is characterized by its high content of nutrients and organic substances. The project (palm fronds hay), which uses the leaflets as a filing fodder with different percentages ranging from 20% to 25%. The hay is 60% to 70% dry, and cut 5-6 cm long and 2-3 mm width.

The Nutritional Value of Palm Tree Fronds

The Table 1 shows Non-traditional animal fodder produced from palm fronds and wastes is characterized by high nutritional value because it contains a huge amount of organic substances, especially protein and cellulose, which helps raise the nutritional value of the produced fodder.

Ashes	Sugars	Fibers	Fats	Crude protein
%12.53	%43.42	%38.42	%1.33	%3.61

Source: Directorate of Animal Wealth, Saudi Ministry of Environment, Water and Agriculture.

The Proposed Production Capacity and Market Share

The project's expected production capacity is 3,000 tons per year based on two working shifts per day and 312 working day per year. The livestock sector is the main consumer of the products of the project, and the demand is usually high on this substance continuously throughout the year. The project's productivity is expected to grow after expansion as shown in the following Table 2.

Year	Percentage of production capacity utilization*	Production (tons)
1	%80	2.400
2	%90	2.700
+3	%100	3000

*Percentage of designed production capacity

Opportunities and Threats

Establishing a project in the area that long works in the same field, which may lead to competition in marketing for producing and selling the products with the right price. On the other hand, the owners personally will operate the project to produce fodder from palm tree fronds, and they have a good experience in marketing the product and knowledge of the targeted market and customers. Also, the total market size available in Jordan is an excellent opportunity for the project as the planned production capacity of 6.800 tons constitutes a small percentage of the total market need. The availability of date palm farms wastes of palms fronds can be viewed as an opportunity because it scattered in the region and accumulated in large quantities where it is currently getting burnt to get rid of due to the absence of any actual use of it, which is harmful to the environment.

Technical Study

The proposed project transforms palm trees fronds into valid fodders for cattle, sheep and ruminants, thus converting these wastes from materials that are a burden on the environment and on farms to materials that can be used to feed ruminants for the benefit of farmers, livestock breeders, the environment and the local community. The following is a brief description of the production process:

1. Palm trees fronds are collected from palm farms by transport vehicles.
2. After collection, it is delivered to the factory floor and unloaded.
3. If the dryness of the fronds is less than 60% - 70%, it will be left to dry naturally by the effect of high temperature in the project area.
4. Dry fronds are inserted to a shredder to convert it into a straw according to the required dimensions.
5. It is filled with 12 kg bags and is sewn and ready for loading to farms.

Strength and Weakness

The team has a good knowledge of the technical aspects of the project. The location of the project in the center of palm farms, which reduces the costs of collecting palm trees fronds. Also it contribute to limit the risk of pollution caused by burning palm fronds in the open areas and therefore this project has a positive environmental character as it reduces the effects of air pollution caused by burning, and saves the environment from the accumulation of large materials and converts them to useful substances through their regularity in the food chain. On the other hand, the mechanism to access the private palm farms to collect palm trees (the extent to which workers are allowed to do so) is unorganized and this requires the project management to develop a plan to coordinate with the owners of farms in advance to facilitate the collection process.

Challenges

It is reported that in various countries up to 40% of entering firms fail within the first 2 years of life (Vivarelli, 2013). Reasons for this high rate could contain the following: unfavorable economic situation, lack of suitable government policies, low level of capabilities, insufficient entrepreneurial competencies; difficulty in accessing technology and low productivity and mostly inappropriate and inefficient utilization of firm resources. Furthermore, the lack of understanding of how small and medium firms can develop essential capabilities and secure their future performance (Azadegan, et al., 2012). However, insights from the United States show a positive indicator where about 50% of all new establishments get through five years or more and about one-third still in business after 10 years (SBA, 2014).

Socio-Economic Impact of the Project

The establishment of the factory in the project area will lead to many advantages and benefits for the local community in particular and the economy in general, by creating employment opportunities, providing foreign currencies, shortening the period of supply to farms and many other social, economic and environmental impacts that enhance the importance of this project and its feasibility. For the environmental impact of the project, it is estimated that about 7-8 thousand tons of the annual production of palm fronds will be converted into useful materials through regularity in the food chain. This will set an environmental precedent in the treatment of this material. (Please note that the net amount of straw produced from one ton is 700- 800 kg, due to a loss after purification of dust and sand).

Project Production Plan

The project proposed production capacity is 3,000 tons per year on the basis of two daily working shifts and 312 working days per year. Currently, the project's productivity ranges from 900 to 1000 tons per year. The livestock sector (cattle and sheep) is the main consumer of the products of the project, and the demand is usually high on this substance continuously throughout the year.

Project Ownership

The project staff consists of an experienced agricultural engineer who holds a master's degree in marketing and has long experiences in the palm trees field treatment and experiments. These experiments lasted for two years, which resulted in the current method adopted in the treatment of palm fronds. The project is managed by a long-standing manager and three professional lecturers. Licenses were issued to start the implementation of the project in terms of the necessary approvals from the concerned parties which was issued by the municipality of South Shona and the Ministry of Industry and Trade in Jordan.

Estimated Total Cost

Tables 3 and 4 show the value of assets will range from (350,000) JD to (360,000) JD as follows: The electricity bill is expected to deplete a significant part of the income (1000-1200

dinars per month), which will be a burden on the project in reaching and exceeding the break-even point, so a strategic decision should be taken to find alternate less cost source of power.

Year	Total Sales	Total Production Cost	Gross Profit	Share of Project Manager (Speculator partner) 30%	Retained Earnings 15%	Net Profit
First Year	847865	683210	164655	49396.5	24698	90560
Second Year	963300	766725	196575	58972.5	29486	108116
Third Year	1093190	861560	231630	69489	34745	127397
Fourth Year	1240020	969630	270390	81117	40559	148715
Fifth Year	1404765	1091910	312855	93856.5	46928	172070
Expected direct costs to produce 1 ton of fodder (1.25 tons of palm fronds as raw material before cutting)						
Statement of cost					JD / ton	
Collect, load, transport and download 1 ton of palm fronds until the hay becomes on the back of the car					65	
Labor wages of cutting 1 ton of hay					15	
Purchase, packaging, sewing bags for 1 ton of hay					9	
Electricity to produce 1 ton of hay					3	
Maintenance of the machine to produce 1 ton of hay					2	
Production cost of 1 ton of hay					94	
Expected indirect costs of the project annually (JD)						
Statement					Amount	
Land rent on which the hangar is built					3000	
Project Manager Salary					18000	
Salary of Workers' Monitor					12000	
Project Accountant Salary					8400	
11 workers of the project					66000	
2 Tipper truck drivers					12000	
Car fuel expenses, licenses, insurance, maintenance					36000	
Total indirect costs					155400	

1	Land area of 20 acres - the allocation of 2 acres to build a hangar	
2	Building hangar on area of 2 acres with a height of 9 meters	110000
3	Chopping Machine	
	4 Italian origin machine of small size	60000
	2 Italian origin machine of large size	98000
	20 meter belt land conveyor hulls	10000
	6 meter belt conveyor head	50000
4	8 meter dryer	60000
5	Conveyor belt after the dryer length of 3 meters	2000
6	-40ton weighing scales	15000
7	Caravan (offices) for the management 12 m * 3 m	6000
8	Electrical cables and control panels	6000
9	3 tipper trucks (second hand)	60000
10	Smoothing machine and accessories	6000
11	15 Pools (holes meters * 8 meters depth 2 meters) for fermentation plastic)	5000
12	Surveillance cameras system	20000

13	Dust suction system	3000
14	Small Transport Car	12000
	Total	406000

RESULTS AND DISCUSSION

Planning and starting up a business is not an easy task; it requires high professionalism to translate an idea into reality and requires entrepreneurship education especially in Jordan as one of the developing countries, where higher education is still viewed through a traditional perspective.

This study is a brief feasibility business plan to prove that combining academic education with entrepreneurship could lead to success in proposing a new of its kind project in the area by a team of full time private Jordanian university lecturers.

During the period of writing this research paper, the teaching of entrepreneurship and small business subject lecturers (owner) team, was able to register the proposal as a company in the Ministry of Industry and Trade -Companies Control Dept. At the same time, they submitted to the university to be one of the companies sponsored by the university incubator to get some technical and marketing support.

The evaluation of this experience does not mean that there are no challenges and difficulties; a lot of effort is needed to shift mind-sets from a more traditional view of teaching entrepreneurship and small business courses by non-practioners to new entrepreneurship education led by a staff that has the essential qualities and business spirit.

CONCLUSIONS

High unemployment rates and lack of natural resources are the most imperative factors of Jordanian economy that need entrepreneurial projects such the one discussed here, which may contribute in solving these problems. However, the lack of essential capabilities to secure the future success is among the challenges facing entrepreneurship in Jordan.

It is well investigated in the previous literature that even if an entrepreneur possesses all the character qualities, a successful venture requires a viable thoughtful plan in which Entrepreneurial Education through the academic institutions can be a good help by acquiring entrepreneurial the necessary skills for success.

We think that well educated, experienced entrepreneurs instructors are able to demonstrate robust engagement with the wider community and increase competitiveness and innovation within the different Jordanian economic sectors, and also to provide graduate students with a meaningful entrepreneurial knowledge to be able to launch their own venture successfully.

Entrepreneurial Education should not be distinct and separate subject but also characterized as a way of thinking innovatively. For example, project cost analysis results show that power bills are depleting a significant amount of expected income, so the team is studying using a solar power system. Moreover, to get financial support, the team will try to get support from USAID's Partnering to Accelerate Entrepreneurship (PACE) Initiative to provide a high capacity machines, or build some partnerships with a range of interested organizations.

RECOMMENDATIONS

It is extremely valuable to talk in depth with business people about what the academic institutions are teaching and its relevance and usefulness to practicing entrepreneurs.

Entrepreneurship educators must practice what they preach in the effort to drive change and improve educational outcomes. Business schools need new insights into pedagogical models that combine practicality and academic rigor with an entrepreneurial-centered approach. Universities could promote entrepreneurship throughout campus via conferences and workshops or more practical to establish on-campus incubators and entrepreneurial center units. The author also believes that it is important to analyze and include key stakeholders when developing curricula.

Recommendations for Future Research

After a thorough review of the literature, one can argue that, no theoretical foundation for developing effective (EE) initiatives or education methods and modalities that can be effective in promoting the kinds of entrepreneurship in terms of wealth and job creation. So this issue merits further investigation in developing countries.

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