How Nestle Applied Shared Value Creation In Agriculture Sector Achieving Sustainable Agriculture And Making More Profit «Nestle Model»

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Abstract:
This paper explains how Nestlé used shared value concept to make agriculture more sustainable and achieve more profit by creating business value. Based on qualitative research, we use a case study approach to investigate the idea of shared value in achieving sustainable agriculture. We analyzed Nestlé programs in three areas: rural development, Environmental sustainability and Water field. We found that applying shared value concept by nestle make agriculture more sustainable and leads for business value.

Keywords: Sustainable agriculture, Shared value creation, Business value, Environmental value, Social value.
JEL Classification: M14, Q01, Q56.

ملخص:
تشرح هذه الورقة كيف استخدمت نستله مفهوم القيمة المشتركة لجعل الزراعة أكثر استدامة وتحقيق المزيد من الأرباح من خلال خلق قيمة أعمال. استنادًا إلى البحث النوعي، استخدمنا طريقة دراسة الحالة لاستكشاف فكرة القيمة المشتركة في تحقيق الزراعة المستدامة، فمثلاً بتحليل برامج نستله في ثلاثة مجالات: التنمية الريفية والاستدامة البيئية ومجال المياه، وجدنا أن تطبيق مفهوم القيمة المشتركة بواسطة شركة نستله يجعل الزراعة أكثر استدامة ويؤدي إلى قيمة تجارية.

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ISSN: 2676-184X
1. Introduction

Nestlé have been providing food and nutrition product for over one hundred and thirty years, however its Agriculture sector business in all over the world is characterized by a growing demand for food, increase in scarcity of water and poor farmers especially in rear areas, so there is a need for nestle to improve farmers living standards environmental protection and water use.

To solve these problems and make agriculture more sustainable Nestlé need to make sure that agriculture sustainability is profitable, based on the fact that most companies invest in an area that yields profit.

We wondering if there is any role for nestle to solve these problems by using Shared value concept, in other terms make agriculture sector more sustainable and achieve more profit and business value for nestle.

The fundamental problem of this study is related to the way Nestlé achieved sustainable agriculture and business value using shared value concept, so the question is:

How Nestlé applied shared value concept to make agricultural more sustainable and make more profit?

2. Shared value creation and sustainable agriculture:

2.1. Sustainability and sustainable agriculture:

Sustainability is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p43) while Sustainable agriculture has been described as an umbrella term encompassing several ideological approaches to agriculture (Gips, 1988) including organic farming, biological agriculture, alternative agriculture, ecological agriculture, low-input agriculture, biodynamic agriculture, regenerative agriculture, permaculture and agroecology (Hansen.J. W 1996, p120)

2.2. Sustainable agriculture and Environmental sustainability:

Environmental sustainability “seeks to improve human welfare by protecting the sources of raw materials used for human needs and ensuring that the sinks for human wastes are not exceeded, in order to prevent harm to humans” (Moldan.B, „sková.S.G, Hák.T2012, p5). Sustainable agriculture considered as a set of management strategies addressing the main societal concerns about food quality or environment protection (Francis C.A., Sander D., Martin A. 1987, p12).

2.3. Sustainable agriculture and Shared value:
The goal of sustainable agriculture is to meet society's food and textile needs in the present without compromising the ability of future generations to meet their own needs (http://asi.ucdavis.edu/programs/sarep/about/what-is-sustainable-agriculture, 01/02/2018). While Shared value According to Porter .M.E & Kramer. M can be defined as policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates (Porter .M.E & Kramer. M , 2011, p6).

We considered shared value as an umbrella for all previous related concepts; Sustainability, sustainable agriculture and Environmental sustainability. We also consider creating shared value as new concept to invest in environmental and social needs in order to achieve sustainability and in the same time making business and social value.

3. Three steps to create shared value:

Shared value can be created by reconceiving products and services to meet societal demands, by redefining productivity in the value chain and by Enabling local cluster development:

3.1. Reconceiving products and markets.

Reconceiving value propositions and markets, requires companies to view their offerings as value propositions in the context of the marketplace, as opposed to standalone goods and services (Mcintosh B, Sheppy B and Zuliani JD,2016). This also refers to identifying the growing unmet need in society, needs for improvements in help for the aging, healthcare, housing, nutrition, financial opportunities and the environment. These needs can be a source of opportunities which businesses today with confidence can pursue in search of growth. The main reasons for this are that after decades of work revolving around analyzing, manufacturing and meeting demand, many businesses have lost focus, losing track of what customers actually needs (Goitom.M 2015).

3.2. Redefining productivity in value chain

Redefine performance measures across the value chain, involves identifying, measuring and tracking those key performance indicators (KPIs), which are relevant to CSV. Moreover, this step is about shifting priorities in terms of how to measure success, so that the business concentrates on measuring what really matters in order to create shared value. Specific KPIs will vary depending on the nature of the business, but in essence, they will focus on measuring parameters across the ‘triple bottom line’: people, planet and profit (Mcintosh B, Sheppy B and Zuliani JD, 2016).

The value chain is affected by externalities, such as water use, working conditions and fair treatment, which can enhance the costs of production. Taking into account societal issues permits companies to redefine their concept of productivity from a shared value perspective. For instance rethinking logistics systems in the shared value perspective means improving energy utilization through technology investments, such as reducing shipping
distances, recycling. All these practices help companies transform the value chain, cutting costs and reinforcing the mutual relationships with partners and stakeholders (Brønn.P.S, Romantis, and Zerfass.A2016).

3.3. Enabling local cluster development

Shared value can be created by enabling local cluster development. Clusters are geographical concentrations of actors (suppliers, logistical infrastructures, institutions, universities, service providers, trade associations and so on), which support a company and its processes. Firms can create shared value and improve their productivity, by building local clusters and addressing their gaps in specific areas such as logistics, training or market organization. Managerial practices driven by transparency and openness principles create favourable conditions for building clusters, which enhance the benefits for companies and their competitiveness (Brønn.P.S, Romantis, and Zerfass.A2016).

We see that reconceiving Products and Markets allows to develop products regard to society’s needs and this what rise the demand on these products, in the same time redefining productivity in the value chain allows to save energy, water, cost and create value for both society and business, then, enabling local cluster development which help to provide infrastructure around creating shared value.

4- Research methodology

We used the qualitative research. The qualitative research can be defined as an approach that seeks to describe, decode and translate phenomena in terms of meaning rather than frequency. Qualitative research allows the researcher to gather information and do an in-depth exploration of issues, and therefore follows a less structured format with fewer respondents than quantitative methods (Bellenger, DN, Bernhardt, KL & Goldtucker, JL 1989, p13).

Furthermore, qualitative research uses words, sentences and paragraphs rather than numbers. Unlike the quantitative methods used to test a theory and make generalizations about populations, qualitative methods are used for gathering deep and rich information.

Summarized the advantages of qualitative research as follows: (sen,s. 2011, p4)
- A method enabling the researcher to understand and explain the personal experiences of individuals.
- Emphasizes people’s understanding and interpretations, and can be used for very narrow studies as well as holistic studies that examine the totality of a situation.
- Allows the researcher to experience research issues from a participant’s perspective.
- Uses a combination of techniques and may even invent methods to provide a broad understanding of a social situation and tends to focus on human interest issues that are meaningful to everyday managers.

This qualitative research approach is appropriate for our study because this kind of study required a lot of information and high understanding for the situations, initiatives in sustainable agriculture and social activities of nestle company. In addition to that there are a
lack of studies and research on this topic when it comes to creating social, environmental and business impact.

Within the qualitative research, we use a case study approach to investigate the idea of shared value in achieving sustainable agriculture. We aim to provide a theoretical and practical contribution to enhance the understanding the concept of shared value creation in sustainable agriculture.

We collect data and information based from Nestle reports, online meeting through Skype with nestle managers, and observations; the authors analyze a single case study of Nestlé company. The objective is showing how shared value concept applied to reach a sustainable agriculture.

4- Creating shared value in agriculture sector “Nestlé model”

4-1 Who is Nestlé?

Nestlé is a Swiss transnational food and drink company headquartered in Vevey, Vaud, Switzerland. It has been the largest food company in the world, measured by revenues and other metrics, for 2014, 2015, and 2016. It ranked No. 33 on the 2016 edition of the Forbes Global 2000 list of largest public companies. Nestlé's products include baby food, medical food, bottled water, breakfast cereals, coffee and tea, confectionery, dairy products, ice cream, frozen food, pet foods, and snacks. Twenty-nine of Nestlé's brands have annual sales of over 1.1 US$ billion including Nespresso, Nescafé, Kit Kat, Smarties, Nesquik, Stouffer's, Vittel, and Maggi. Nestlé has 447 factories, operates in 194 countries, and employs around 339,000 people. It is one of the main shareholders of L'Oreal, the world's largest cosmetics company [http://www.nestle.com/aboutus](http://www.nestle.com/aboutus) (16/02/2019).

4-2 Nestlé approaches to create shared value:

4-2-1 Reconceiving products and markets:

At a global level, Nestlé has prioritized product innovation for improved health and nutrition, reformulating over 6,500 products over the past decade. Over 75% of Nestlé’s product portfolio now exceeds the company’s World Health Organization-inspired nutrition criteria. Product reformulations range from fortifying products to meet geographic-specific nutritional deficiencies, such as iodine, iron, calcium, and vitamins in Latin America, to reducing sodium or fat content. Furthermore, Nestlé’s CEO announced in 2012 that the company would accelerate its plan to meet its public nutritional commitments. These commitments establish plans to increase the nutritional value of all of Nestlé’s products, comply with high nutritional standards for all infant products, and promote children’s nutritional education and healthy living at the global level [www.sharedvalue.org/18/02/2019](http://www.sharedvalue.org/18/02/2019).

4-2-2 Redefining productivity in the value chain:

Nestlé helped more than 63,000 farmers in coffee-producing countries to improve the quality of their produce, boost productivity. Working with farmers to increase
productivity through loans, technology and knowledge transfer, the support of agronomists, and improving and focusing our industrial capacity to produce higher value added food products locally helps the region's communities realize their growth potential and in the same time increase nestle productivity in the value chain and help ensure access to high quality crops for Nestlé business (Nestlé report, 2014, p6).

4-2-3 Enabling local cluster development:

Nestle built clusters in which its new procurement practices far more effective. Nestle set out to build agricultural, technical, financial, and logistical firms and capabilities in each of region, to further support efficiency and high-quality local production. Nestle led efforts to increase access to agricultural inputs such as seeds, fertilizers, and irrigation equipment. It also strengthen regional coops by providing financing facilities, shared wet milling facilities for producing higher quality beans, and educating farmers with the latest farming techniques. Nestle also worked in partnership with Rainforest Alliance, a leading international NGO, to teach farmer more sustainable practices (Nestlé Creating Shared Value Report, 2011, p124).

We see that Nestlé followed the three steps to create shared value by reconceiving 75% of Nestlé's product portfolio; it also redefined productivity in the value chain by helping more than 63,000 farmers in coffee-producing countries and by doing that; Nestle improve its own productivity. Nestlé also enabled local cluster development through partnership leading international NGO, to teach farmer more sustainable practices.

4-3 Nestlé Programs to create shared value

4-3-1 Creating shared value in Water field:

Nestlé followed 31 programs in field of water; clean drinking water project, clean drinking water project, Watershed conservation and biodiversity protection, Safe Drinking Water Facilities, Investing in water efficient factories, treating waste water, Promoting water stewardship (Skype and telephone calls with nestlé responsible 22/01/2019).

Responsible water stewardship is critical to the future of Nestlé business and we're helping to facilitate the sustainable management of water catchments, to make it clearer nestlé provide three programs in United Kingdom and Spain as follows:

4-3-1-1 Promoting water stewardship at Nestlé’s Douala factory

-Program description:

The business sector operates across a wide value chain, and it is uniquely positioned to both respect and promote the need for safe water and adequate sanitation. Members of the World Business Council for Sustainable Development (WBCSD) have developed a public pledge where participating companies agree to deliver access to safe water, sanitation and hygiene (WASH) for all employees working in premises under direct company control within a three-year period In 2014, we completed a Water Resources Review (WRR) at our Douala factory in Cameroon where we produce Maggi soup bases Nestlé Full report 2015, p4). Nestlé used the World Business Council for Sustainable Development’s WASH self-
assess tool to examine access to water, sanitation and hygiene for more than 500 employees, vendors and visitors to the site. The factory satisfactorily met the Pledge’s overall compliance levels, and we have developed an action plan to tackle the few improvement issues it highlighted (www.nestle.com, 22/02/2019).

- **Value to Society and environment:**

  To date, 25 signatories (including Nestlé) have adopted the WASH Pledge, and interest has accelerated over the past 12 months. Existing signatories are from 15 business sectors, and they represent operations in Western Europe, Eastern Europe, the United States, Asia and the Middle East. Over the past year, we have helped to promote the value of the pledge to the business community through public platforms and participation in peer to peer dialogues, including on World Toilet Day and at the WASH session of the UN Water Annual Zaragoza Conference in January 2015 (www.nestle.com, 23/02/2019).

- **Value to Nestlé**

  Nestlé was one of the first signatories to sign up to the pledge, as we believe that it demonstrates how we deliver on our Corporate Business Principles and on putting our people first. Through the WASH Pledge, 339,456 employees from Nestlé are ensured access to safe water, sanitation and hygiene (www.nestle.com, 24/02/2019).

4-3-1-2 Treating waste water with bio-digestion in United Kingdom

Nestlé’s Fawdon confectionery factory in the UK invested CHF 4.9 million in an anaerobic digestion system, which was completed in September 2014. The system converts solid and liquid sewage waste into clean water and methane gas using natural biological digestion processes. The facility will save 1000 tones of carbon dioxide every year, cut solid waste by 4000 kg per day, and reduce effluent discharges by 95% (Nestlé Full report, 2014, p4).

- **Value to Nestlé**

  Nestlé have achieved strong water efficiency performance across Nestlé’s operations over recent years. In addition to saving and using water more efficiently, in the case of nestle factory in Fawdon, this represents financial savings of 380 000 CHF in effluent charges and 600 000 CHF in electricity charges (Nestlé report, 2014, p1).

- **Improving water efficiency at La Penilla in Spain**

  The project began in 2011, when Nestlé’s factory manager brought together a multidisciplinary team of employees to identify opportunities for reducing water use. Since then, Nestlé have modified the regulation of water flow through our milk evaporators and it now uses 1 million m$^3$ less water every year, the equivalent of 400 Olympic swimming pools. The factory has installed three new cooling towers with a more efficient closed refrigeration loop system that recycles water, which delivered a 25% reduction in water use during the first half of 2013 (Full Report, 2013, p184).

- **Value to Society**
The project has also improved awareness of the benefits of water stewardship among our employees, creating positive behavioral change for the long term (www.nestle.com 25/02/2019).

-Value to Nestlé

Nestlé have achieved substantial improvements in water efficiency in recent years, against many competing priorities, and will continue to do so. Despite a steady increase in Nestlé manufacturing production over the past 10 years, we’ve steadily decreased our water use. In 2013, Nestlé implemented 171 programs in its factories to reduce and reuse water sources, which have saved 3.6 million m3 of water. Nestlé have reduced direct water withdrawals in every product category and achieved an overall reduction per tonne of product of 33.3% since 2005. Nestlé want to go further and have targeted a 40% reduction of direct water withdrawals by 2015 (Full Report, 2013, p185).

4-3-2 Creating shared value in rural development:

The raw ingredients and materials we need for our products are sourced from millions of farmers across the globe. We work with them and other suppliers to support sustainable development in the rural areas where their farms are located.

Nestlé followed 62 programs to create shared value in rural development; we only provide two programs in China and Venezuela as follows: (Nestlé summary report, p17).

4-3-2-1 Developing the dairy farming sector in China

Nestlé built its factory in Shuangcheng, China, in 1987. In 2012, having recognized a need to improve the sustainability of our milk supply chain, we committed to establishing the Nestlé Dairy Farming Institute (www.nestle.com, 27/02/2019).

Helping farmers to increase their knowledge and skills is a key focus area of Nestlé rural development strategy. By adopting best practices, farmers are able to improve productivity, trading relations and cost control. The Institute consists of three demonstration dairy farms, where farm owners and workers attend training sessions to improve farm management skills, learn how to use the latest technology and gain practical experience in expanding their businesses (Skype and telephone calls with Nestlé responsible 22/02/2019).

In 2014, the Institute launched training programs covering dairy farm management and dairy cow breeding.

4-3-2-2 Agriculture sustainability and value creation for Society

As more people than ever move away to urban areas, Nestlé facing an ageing global farming population. We would like to see rural areas that are attractive to live, work and invest in, so Nestlé put the farmer at the centre of what we do, by supporting farming as a business and as a livelihood of choice that offers an attractive income and opportunities for societal advancement (storage.nestle.com, 27/02/2019).

4-3-2-3 Value to Nestlé

Nestlé has a huge stake in rural communities around the world, sourcing agricultural raw materials from millions of farmers globally. These farmers are essential to the ongoing
success of our business, but the global farming population is ageing and more people are moving away to urban areas (www.nestle.com, 27/02/2019). The Nestlé Rural Development Framework helps align business activities with local development priorities. In addition to helping farmers access financial assistance, our agripreneurship model provides a training pipeline for farmers to develop their skills (www.nestle.com, 27/02/2019).

Nestlé is one of the world’s biggest chocolate producers, operating in more than 32 countries, and it has always been important to help tackle challenges facing the cocoa industry. These include poor living and working conditions, poor quality cocoa harvests and declining cocoa production (www.nestle.com, 27/02/2019).

### 4-3-3 Nestlé Cocoa Plan in Venezuela

In Venezuela, Nestlé have faced a number of challenges in securing a reliable supply of some of the world’s finest cocoa; these range from a decline in the quality of native cocoa plants to the limited appeal of agricultural work to the younger generation. But through the Nestlé Cocoa Plan, we are helping to make cocoa production a livelihood of choice – one that leads to higher incomes and improved social conditions (www.nestle.com, 07/03/2019).

Six hundred farmers across the country’s three main cocoa-producing regions are currently involved in the Nestlé Cocoa Plan. And since 2008, Nestlé Venezuela staff has made almost 6130 visits to their farms, distributing high-quality plantlets and organic fertilizers, offering technical assistance and providing training in good agricultural practices such as pruning (Nestlé summary report, 2014, p18).

#### 4-3-3-1 Sustainable Agricultural and value creation:

Through training in better agricultural and environmental practices, distributing high-yield plants and supply chain traceability, we can improve the profitability of Nestlé suppliers and help secure a long-term supply of high-quality cocoa for our business, while addressing the issues surrounding children and women in the supply chain leads to better social conditions. Globally, against an objective to train 25 000 cocoa farmers, we actually trained 45 833 cocoa farmers in better agricultural practices in 2014, using a variety of methods – including farmer field schools and farmer business training – to help improve farm profitability (www.nestle.com, 07/03/2019).

#### 4-3-3-2 Value to Nestlé

Through the Nestlé Cocoa Plan, we aim to help cocoa farmers operate productive and profitable farms that respect the environment and provide a good quality of life. This in turn ensures a sustainable supply of good-quality cocoa for Nestlé (www.nestle.com, 07/03/2019).

### 4-4 Environmental sustainability by applying shared value Creation:

Nestlé committed to environmentally sustainable business practices at all stages – making the right choices to protect the future and also to help Nestlé optimize the
environmental performance, Nestlé apply a life-cycle assessment approach. Nestlé followed 56 programs in field of environmental sustainability in order to committed to environmentally sustainable business practices at all stages – making the right choices to protect the future and also to help Nestlé optimize the environmental performance, Nestlé apply a life-cycle assessment approach. We only provide two programs in Switzerland and United Kingdom as follows: (www.nestle.com, 07/03/2019)

4-4-1 eTrucks help green urban deliveries in Switzerland:
To help reduce its CO₂ emissions and environmental footprint, in 2012, Nestlé launched the world's first 100% electric vehicles for frozen distribution across Switzerland. The two groundbreaking e-trucks are used by Nestlé Switzerland to deliver its frozen products and significantly lower CO₂ emissions (by 95%) while maintaining the highest standards of food quality using Green electricity will also be part of the equation. Nestlé has installed several thousand square meters of photovoltaic panels on a number of its Swiss administrative buildings, providing enough energy to run the equivalent of 30 electric trucks for a whole year (www.nestle.com, 07/03/2019).

- Creation of sustainable value for environment and society:
By investing in the latest technologies to reduce the environmental impact of product transportation and optimize delivery routes, Nestlé is using fewer resources and significantly lowering its CO₂ emissions. This helps keep the environment cleaner for everyone. Using eTrucks is also lowering noise pollution (www.nestle.com, 07/03/2019).

- Value to Nestlé
The reduction in resources required to safely deliver its products, helps Nestlé save time, energy and costs. By involving employees in the solution, Nestlé is also creating a more rewarding work place environment for its people (www.nestle.com, 07/03/2019).

4-4-2 Achieving Zero Waste to Landfill in United Kingdom
By the end of 2012, half of our 14 UK factories had been externally verified as sending zero waste to landfill, starting with Girvan, in Scotland, and Dalston, in Cumbria, which both achieved this status in 2010, five years ahead of target. In other factories, waste has already been significantly reduced, bringing with it reductions in energy consumption and transportation requirements Note: ‘Zero Waste’ excludes a minimum amount of hazardous waste that is sent to specialist processing sites that ensure its safest disposal (www.nestle.com, 07/03/2019).

- Value to Nestlé, Society and the environment:
As a result of our Zero waste initiative: (www.nestle.com, 07/03/2019).

- Nestlé now taking fewer resources and energy from nature, protecting the environment
- Less waste, means a cleaner environment for everyone
- Donating fit-for-consumption food to Fare Share from our surplus helps feed to homeless, disadvantaged and vulnerable people across the UK Value to Nestlé
- In reducing our waste we have improved efficiency and lowered costs
- All staff has been trained in our waste strategy - skills that will bring business benefits for many years to come
- Using recovered materials has helped lower costs, as well as reducing our resource and energy consumption.

4-4-3 Nespresso AAA Sustainable Quality Program

Worldwide demand for coffee continues to grow, and our coffee businesses are focused on ensuring that supplies in the long term are able to meet increasing consumption on a sustainable footing. However, the challenges we face include volatile prices, declining yields and strong competition for raw materials - with coffee growing being challenged by alternative crops considered by growers as better commercial prospects (Nestlé full report, 2013, p151).

Launched in 2003, in collaboration with the Rainforest Alliance, the Nespresso AAA Sustainable Quality™ Program seeks to protect the highest quality coffees required for Nespresso Grands Crus, while improving sustainable farming practices and enhancing farmer welfare (www.nespresso.com, 27/02/2019).

Agricultural value creation:

By establishing long-term relationships with more than 62,500 farmers in eight countries, a network of 248 dedicated sourcing staff work closely with farmers on the ground, encouraging sustainable farming practices, improving quality, optimising farm productivity and , as a result, securing farmers' livelihoods through higher net incomes (www.nestle.com, 27/02/2019).

By the end of 2013, 290,000 hectares of farmland were under our active sustainable management program, helping Nespresso successfully meet its commitment to source 80% of its coffee through its AAA Sustainable Quality™ Program. Having reached 84%, Nespresso is now looking to source 100% of coffee through the AAA Program (Nestlé full report, 2013, p155).

As a result, the program has been extended it to include economic and social development projects for farming families and communities in Ethiopia and Kenya, with the aim of doubling the amount of coffee sourced from the two countries by 2020. Nespresso is also planning to revive coffee production in South Sudan, through a partnership with the NGO Techno Serve, which specializes in developing business solutions to poverty (www.nestle-nespresso.com, 27/02/2019).

4-4-4 Improving the environmental performance of packaging in Thailand:

In order to create shared value nestle followed a program called “Improving the environmental performance of packaging “in Thailand, this program achieved environmental sustainability leads to business value.
-Programme description:
  We have renovated the packaging for our Maggi dipping sauce bottles in Thailand, by reducing the amount of plastic used in the bottles and caps, optimizing shipping cases and replacing the paper label with PET shrink film. This has generated an annual net saving of 64 tones of plastic and 43 tones of paper and board (Nestle full report, 2014, p166).

-Value to Society and environment:
  Packaging design can make an important contribution to environmental performance across the product life cycle. Over-packing can result in waste, while not packaging a product adequately exposes it to damage or contamination, resulting in food waste. Finding the right balance can, therefore, be a challenging exercise, but with impactful results (www.nestle.com, 27/02/2019).

-Value to Nestlé
  Towards our global commitment to improve the environmental performance of our packaging, we avoided the use of 45 805 tones of packaging material by weight in 2014. This is equivalent to a cost saving of CHF 77.4 million, in 2014. We have committed to avoid the use of at least 100 000 tones of packaging material over the next three years to 2017. Overall, the cumulative amount of packaging we have avoided since 1991 is more than 710 000 tones, saving CHF 1 261 million in packaging costs. The environmental benefits are also significant: over the last five years, we have avoided over 481 000 tones of CO2eq – equivalent to taking more than 104 000 cars off the road for a year (Nestle full report, 2014, p166).

4-4-5 Cocoa Farm School in Mexico:
In order to create shared value Nestlé followed a program called “Cocoa Farm School in Mexico”, this program achieved environmental sustainability leads to business value (www.nestle.com, 12/03/2019).

-Program description
  In 2010, Nestlé México started the Cocoa Plan, which included a component called the Farm School model. Farm schools are a training scheme for farmers where the classroom is the cocoa plantation and farmers can learn by practicing the different technical aspects of cultivating the crop. The model consists of more than 10 subjects with sessions every 15 days (www.nestle.com, 12/03/2019).

-Sustainable Value for agriculture and farmers:
  So far more than 130 farmers have participated in the Farm Schools in the areas of Tabasco and Chiapas. As a result of their participation farmers have learned how to control the Monilia disease and some of them have even doubled their production (www.nestle.com, 12/03/2019).

-Value to Nestlé
Local cocoa production has started to increase gradually. Farmers participating in the Farm School model have formed more than 5 cooperatives that they supply directly to Nestlé under the Cocoa Plan (www.nestle.com, 12/03/2019).

**4-4-6 Sustainable Agriculture Coffee Initiative**

**Program description**

A key step in post-harvesting is the transformation from freshly harvested cherries into dry beans. This can be achieved by drying the cherries in the sun or by wet processing, but wet processing often consumes unnecessary amounts of water. To improve water management in local coffee production, Nestlé México’s “Ecological Milling” Initiative works with government, coffee exporters, mills, local farmers and coffee equipment companies to reduce water use (Skype and telephone calls with Nestlé responsible 26/03/2019).

The initiative has also been promoted by the Mexican government to others in the Mexican coffee milling industry.

**Sustainable Agriculture and Value to Society**

Under the Sustainable Agriculture Initiative of Nestlé (SAIN), our approach to promoting the principles and practice of sustainable agriculture among suppliers and producers, we have also collaborated with the National Forest and Agricultural Research Institute (INIFAP) for more than 25 years. With the installation of an experimental laboratory for somatic embryogenesis – an effective propagation technique – in Rosario Izapa, Chiapas, our partnership has resulted in the production of high-quality coffee beans and attracted international sponsorship (Skype and telephone calls with Nestlé responsible 26/03/2019).

Nestlé program of assistance also includes: support for the Micro-Region Supporting Program, a government initiative that helps the poorest 250 municipalities in the country, by focusing our training program on 1,500 coffee growers from 60 communities in Tezonapa, one of the country’s poorest locations Establishing the Centro Comunitario Nestlé, in alliance with the Fondopara Niños de México, to offer complimentary education, health and dentistry services to more than 1,000 children of local farmers (Skype and telephone calls with Nestlé responsible 26/03/2019).

**5. Conclusion:**

This paper has clearly shown that creating shared value is an umbrella for terms of; sustainability, environmental sustainability and agriculture sustainability. Shared value creation allows achieving agriculture sustainability through, Environmental sustainability, rural development and Water field.

It is evident that this study has shown the way Nestlé applied shared value concept; by reconceiving products and services to meet societal demands, by redefining productivity in the value chain and by enabling local cluster development, these activities and initiatives lead to sustainable agriculture.
In addition to that Nestlé followed a set of programs and worked with farmers to improve their input, output and incomes, this lead to higher production and sustainable agriculture and in the same time create more business value for Nestlé, in other terms value are gained by Nestlé, farmers and environment.

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How to cite this article by the APA method:
Kherchi, I., Fellague, M., & Haddou, S. A. (2019). How Nestle Applied Shared Value Creation In Agriculture Sector Achieving Sustainable Agriculture And Making More Profit «Nestle Model». Management & Economics Research Journal, 1(3), 12-26. https://doi.org/10.48100/merj.v1i3.38

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