

## **Project Synopsis**

### **1. How the Project was originated**

The food & beverage industry is a very important industry sector of the Sri Lankan economy that contributes around 10 percent of the GDP. The sector has a total of 37,708 firms employing more than 200,000 employees. Around 35,418 of them (94%) of them are small firms while the balance 6% is medium to large-scale firms. Majority of the SMEs in the F&B sector in Sri Lanka have not focused adequate attention on sustainable production practices, which would offer maximum return out of the natural resources consumed by those industries. As a result, SMEs in the F&B industry are facing serious challenges in meeting intense international competition and complying with international standards and environmental norms. These SMEs need to improve their resource utilization, quality standards and overall price competitiveness to overcome these problems. The most appropriate approach to address these needs and constraints is to promote sustainable production practices among SMEs in the F&B industry, which will minimize the use of natural resources and reduce generation of waste leading to increase in competitiveness and market acceptance of their products.

Therefore, when the European Union announced the first Call for Proposals on the SWITCH Asia Program in 2008 November, the Ceylon Chamber of Commerce felt that this will be an ideal opportunity to assist the SME in the Food and Beverage to improve their resource efficiency and the competitiveness. The CCC together with its local partners, Industrial Technology Institute, Industrial Service Bureau (ISB) and Industrial Development Board (IDB) and International Partners, IVAM Uva BV of the Netherlands and Confederation of Indian Industry (CII) of India developed a comprehensive proposal for Promotion of Sustainable Production in the F & B sector in Sri Lanka. European Union selected only 17 proposals out of 360 proposals and the CCC project was awarded a grant of Euro 1.585 Mn. Thus, the CCC was able to commence this laudable initiative to assist SMES in the F & B sector to adopt best practices in Sustainable Production and Consumption in January, 2009.

### **2. Description of the Project based on the category selected**

At a global level, the world population, which was only 1.6 billion in 1900 increased to 6.1 billion by 1999. Global population is still rapidly increasing and has reached 7 billion in 2012 and demographers predict that it will reach 9 billion by 2040. More people mean more consumed resources, increased damage to the earth and greater waste. Population growth has had an adverse impact not only on our own species but also on other species as well due to the competition for limited resources such as food and habitat and creating huge imbalances on biodiversity with further devastating consequences. In addition to population growth, other factors such as archaic production methods and excessive consumption also leads to significant depletion of natural resources.

At the local level, with the end of internal conflict in Sri Lanka, which has devastated the economy and the social fabric, Sri Lanka has recorded a GDP growth of 8% in 2010 and 2011 and despite the global recession, it is expected Sri Lanka will record a GDP growth close to 7% in 2012. Tourist arrivals have recorded a remarkable growth from close to 500,000 tourists per annum in 2009 to almost 1,000,000 tourists in 2012. With the increasing influx of tourists to the country, the food and beverage (F&B) industry is at an exceptionally advantageous position to realize its maximum potential. However, as the majority of the players in the F&B industry in Sri Lanka fall under the Small and Medium Enterprise (SME) category, they need to improve the quality standards and price competitiveness of their products to make maximum advantage of the opportunities created with the rapid growth of the economy. The most difficult hurdle for the SMEs in the F & B industry is the escalating cost of utilities and raw material, which significantly contributes towards increase in cost of production with corresponding decline in market competitiveness. The other significant disadvantage the exporters of F & B products face is the lack of compliance with international standards of food safety. Only a fraction of the companies supplying to international markets has obtained internationally accepted food safety standards such as, ISO 22000, HACCP and related

environmental compliance, ISO 14001. This scenario has resulted in low market acceptance for such products.

With the adverse impact of climate change and global warming being clearly visible in all parts of the world, it is widely accepted that the concept of sustainable consumption and production (SCP) is one of the major tools that can address the damaging consequences of increased pressure that is being exerted on the resources of the world as a result of these factors. *At the same time SCP can help SMEs to improve the quality, competitiveness and profitability of their products through improvement resource efficiencies, minimization of waste generation and gaining better market acceptance.*

Recognizing this, the CCC launched the “Promotion of Sustainable Production among SMEs in the F & B Sector in Sri Lanka Project under the SWITCH Asia Program of the European Union. The project focused on the F & B sector as it is a very important industry sector of Sri Lankan economy that contributes around 10% of the GDP and generates annual export revenue of US\$ 1.4 Bn. F&B producers, in particular the SMEs, have been experiencing increasing difficulties in maintaining their market shares due to increasing costs of production resulting from price increases, extensive use of materials, energy and water and inefficient and unsustainable production practices, mainly due to poor awareness of the issues on the part of SMEs and a lack of necessary expertise and resources to address them. The project aimed at addressing these constraints through promotion of best practices in SCP among SMEs.

The overall objective of the project is to improve the environmental performance of the F&B sector in Sri Lanka through promotion of best practices of sustainable production among SMEs.

The specific objectives of the projects are to:

- (i) increase local capacity in Sustainable Consumption and Production (SCP) for effectively deliver services to local SMEs,
- (ii) assist SMEs in the F&B industry to adopt best practices in SCP and comply with international food safety regulations and standards
- (iii) improve the enabling conditions for successful implementation of SP in Sri Lanka

The estimated results of the project were: At least 500 SMEs in F & B sector adopting SCP practices leading to a significant i) Reduction of material consumption and increasing the percentage and volume of recycled materials, ii) Improvement of energy efficiency, iii) Reduction of water consumption and increasing the percentage and volume of water recycled and reused, iv) Reduction of emissions, effluents and waste and increasing the recycling of waste.

### **3. Results and influence of this project**

The Project has been able to achieve its overall objective and the specific objectives to a greater extent and the results achieved by the project are highlighted below;

#### **1. Local partner organization be trained in best practices of SCP by European and Indian partners**

**The Project has successfully achieved this target.** IVAM and CII have carried out training of trainers programs involving 20 staff members from partner organizations. Training programs were conducted in Sri Lanka, The Netherlands and India. The training has been comprehensive and the trainees had a good foundation laid on SCP practices as well as certification methodologies, GRI, Integrated Management, life cycle analysis and green procurement.

#### **2(a). 500 SMEs participating in the Project**

The project target is to enrol 500 SMEs to participate in the Project. Through an aggressive promotional campaign through newspaper advertisements, information dissemination by post and e-mail, recommendations by project partner organisations and door to door canvassing and canvassing the Project has been able to educate 939 SMEs. Due to various reasons some dropped off and 749 staff members from 519 SMEs from covering 11 districts have been trained on SCP methodologies by the Project.

#### **2(b).225 SMEs (45% of 500) successfully adopting SCP practices**

Of the 519 SMEs trained, the project conducted baseline surveys in 231 SMEs interested in adopting SCP practices. These 231 industries were assisted to implement SCP practices through in house consultancies. Of these, 65 industries have gone through adopting the full range of SCP practices and has become fully SCP compliant. Another 53 are following through, at a slower pace. Another group of 113 is lagging behind due to financial and other constraints.

#### **2 (c). Reduction in cost of production of participating SMEs**

The SMEs, which have become fully compliant with SCP have achieved considerable saving in energy, water, materials and reduction of GHG emissions, waste water and solid waste. These achievements are shown in the table below.

**The impact of Adopting SCPs on the Sub-Sectors of the Food and Beverage Sector**

No.	Sub-sector	Reduction of Resource Consumption (%)			Reduction of Emissions (%)		
		Energy	Water	Material	CO2 Emission	Waste Water	Solid Waste
1	Processing and Preserving of Meat and Meat Products	4.37	7.78	0.00	0.00	7.78	0.00
2	Processing and Preserving of Fish and Fish Products	6.04	36.77	0.00	6.03	36.77	0.00
3	Processing and Preserving of Fruits and Vegetables	12.59	13.70	0.00	12.59	13.70	10.84
4	Manufacture of Dairy Products	25.83	25.56	0.00	20.71	25.56	16.45
5	Manufacture of Grain Mill Products	20.99	6.59	1.37	20.99	5.70	2.70
6	Manufacture of Bakery Products	39.62	26.88	0.00	41.47	26.88	0.00
7	Manufacture of Cocoa, Chocolate and Sugar Confectionery	55.67	23.83	12.43	0.00	23.83	1.21
8	Manufacture of Macaroni, Noodles, Couscous and similar farina	18.32	11.47	1.14	6.04	11.47	3.67
9	Manufacture of Tea and Tea Products	20.41	0.00	3.31	17.93	0.00	10.78
10	Manufacture of chili powder, condiments powder, processing of spices	22.54	7.95	0.00	15.51	7.95	10.84
11	Manufacture of other food products n.e.c	21.65	12.80	7.48	20.58	12.80	5.46
Total Saving percentage (%)		20.23	15.51	4.05	18.12	15.45	8.91

From the above it is seen that when taken as a whole, the Food and Beverages Sector Enterprises in Sri Lanka that have adopted SCP practices under the Switch-Asia Programme, have performed extremely well in achieving the targets set at the beginning of the project.

**Energy:** In the field of energy the overall saving achieved against the consumption figures in the baseline survey is as high as 20.23%, whereas the project target is only 10%. These performance indicators show that in energy conservation the successes achieved are a real credit to the project and an indicator that the people involved in promoting energy savings can be proud of their achievements.

**Water:** In the water segment the overall saving achieved against the figures in the baseline survey too is quite high having achieved 15.51%. This is almost double the targeted result of 8%. The performance in water savings in the food and beverages SMEs implementing SWITCH-Asia Project is creditable.

**Raw Materials:** Of the 11 sectors 6 have recorded 0% savings in raw materials. Only 2 sectors have achieved or exceeded the indicated target, with cocoa, chocolate & sugar confectionary sector achieving 12.43% which is in excess of double the target figure. The manufacturers of other food products sector with 7.95% is the only other sector exceeding the target. The overall achievement in saving of raw materials is 4.05% which is lower than the target of 5%.

**GHG Emissions:** The overall reduction in CO2 emissions achieved by SMEs is 18.12% which is significant. The highest percentage savings in GHG at 41.47% is recorded in the bakery sector, while meat products sector and cocoa, chocolate & sugar confectionery sector show no reduction. The overall reduction in GHG gases has exceeded the target.

**Waste Water:** Reduction in waste water has been achieved in SMEs by introducing conservation measures, treatment, recycling and reuse. Overall reduction of waste water under the Project is estimated at 15.45%. Except in the tea sector, where no reduction is recorded, the reduction of waste water in all sectors has been substantial, with the fish processing sector showing a reduction as high as 36.77%. Bakery sector with 26.88% reduction comes next with dairy sector coming close with 25.56%.

**Solid Waste:** Overall reduction of solid waste from SMEs in F&B sector has been computed at 8.91%. The highest reduction has been recorded in the dairy sector at 16.45%. This is followed by fruit & vegetable processing, spice processing and tea sectors achieving reductions of 10.84%, 10.84% and 10.45% respectively.

## **2(d). Compliance with food safety standards**

**The project has carried out training of 191 SMEs for ISO 22000:2005 and ISO 14001:2004.** While some SMEs continued to obtain these certifications, some opted for obtaining only the Good Manufacturing Practices (GMP) due to high costs involved in the external review and certification. However some SMEs were assisted by the Ministry of Industries by reimbursing funds spent for these activities.

The number of SMEs trained and the number that has obtained certifications is shown below.

Trained for ISO 22000-2005 certification	191
Obtained ISO 22000-2005 certification	22
In the process of obtaining ISO 22000-2005 certification on	53
Trained for ISO 14001	11
In the process of obtaining ISO 14000-2004	4
Good Manufacturing Practices Certification	9

Only 22 SMEs have already obtained ISO 20000:2005, 53 are in the process of ISO 22000:2005 certification, 4 are in the process of obtaining ISO 14001:2004 and 9 have obtained GMP certificate. Accordingly the target of 70 industries being fully compliant with food safety standards has not been fully satisfied. However 53 more are in the process of obtaining international food safety certifications.

**Policy Initiatives:** In order to ensure implementation of SCP initiatives environment safeguards and Food Safety Certification in the Food & Beverages industry sector in the country, it is necessary to get legislative support and government blessings. This can be achieved only by creating an enabling environment. Towards achieving this objective, the Project has formulated 8 policy instruments with appropriate strategies for implementation and submitted them to the government authorities. Out of the 8 policy initiatives, the “National Green Reporting” mechanism, which was developed through a partnership between the Project and the Ministry of Environment, has already been implemented. Cabinet approval has been granted to the other policy initiative, the Green Procurement, which is aimed at discouraging import of environmentally unfriendly goods and it will be implemented in the near future.

#### **4.4 Impacts**

The ‘impact’ of the Project means both its positive and negative consequences. The SWITCH-Asia Project for promoting SCP to SMEs in the F&B Industry in Sri Lanka has been instrumental in introducing the CCC to work with SMEs on an intimate level. Through this project CCC has been able to get the foreign partners IVAM & CII to share their knowledge and expertise on SCP & International Food Safety Certification with representatives of local project partners, thereby creating a team of experts capable of disseminating SCP concepts in Sri Lanka.

When Food & Beverage Sector in Sri Lanka was introduced to SCP methodologies by the team of experts trained as stated earlier, many SMEs in the sector were awakened to look at themselves in a new light. By their own admission, SMEs were afforded knowledge to get ‘out of the rut’ and think innovatively to make improvements in their enterprises.

SMEs were given knowledge and guidance to make necessary changes in their work places which would introduce savings in energy, water and raw material usage and minimize waste, waste water, GHG, improve recycling of waste etc.

Workforce in SMEs were given training in SCP methodologies, good housekeeping practices, cleanliness, conservation etc. bringing about substantial changes in their outlook and changes in attitudes. This is one of the greatest achievements of the project.

By introducing new measures consumption in energy, water and raw materials as well as GHG emissions and waste were reduced bringing about additional profits to the enterprise and reducing the adverse impact on the environment.

Introduction of SCP methodologies necessitated proper record keeping and SMEs have improved this aspect drastically. This has automatically introduced management to be more methodical in their handling of production as well as manpower.

Introducing certification methodologies have opened more market opportunities and competitiveness in international markets for F&B sector.

The policy initiatives initiated by SWITCH-Asia Programme, when implemented would contribute to better enabling conditions for SCP practices.

Introduction of policy initiatives has brought about a comfort zone where SMEs feel that the government too is supporting these initiatives.

National Green Reporting system introduced recently is a great achievement.

SMEs starting renewable energy initiatives as a result of awareness created by the project are a salutary development.

Promoting SCP concepts most of the time seems to be based on possible reduction of COP and resultant enhancement of profits. Environmental/natural resource conservation has not rung many bells, and seems to be the lowest priority. This is an area that needs to be considered.

#### **4. Applicability of the project idea in other parts of the world**

In today's globalized business world, business activities are dominated by transnational companies and large scale national companies. SMEs, which have less access to finance, technology and market, face huge challenges in facing the fierce market competition posed by large scale companies. In developed economies, SMEs play a key role in national economic development through close partnership with large scale companies as suppliers, sub contractors and service providers. Thus, the business development organizations such as Chambers of Commerce in developing and emerging economies has crucial role in improving the competitiveness and long term sustainability.

On the other hand, the world is facing serious challenges due to the adverse impact of climate change and global warming, which poses a great threat to not only the long term sustainability of businesses, but also to the very existence of mankind. Transnational companies and large scale companies, who has access to necessary resources, knowledge and technology have already adopted SCP practices, which minimize the demand on scarce natural resources through improved resource efficiencies. Although, SMEs may not have access to necessary resources, they too have a responsibility to minimize the adverse impact on the environment through reducing their carbon foot print. Most of the large scale companies now adopt the triple bottom line approach or 3 Ps approach, People, Planet and Profits. Sustainable Consumption and Production (SCP) practices encourage businesses to adopt triple bottom line approach. The "Promotion of Sustainable Production among SMEs in the F & B Sector in Sri Lanka" implemented by the Ceylon Chamber of Commerce is a very successful project that has helped a large number of SMEs to adopt best practices in SCP. The Project is true public private partnership, which has amply demonstrated that SMEs can successfully achieve their business objectives while making a significant contribution towards mitigating climate change. Only a handful of Chambers of Commerce have embarked on technical support service project of this nature, therefore, sharing the success story of this project will help the Chambers in other parts of the world to replicate similar initiatives.

#### **5. Why this project should be selected as a finalist and presented at the 8th World Chambers Congress**

In most cases, the SMEs receive only micro finance and business development services (BDS) through the Chambers of Commerce as well as public and NGO sector business support service organizations. However, in today's competitive business world, SMEs require hands on support in many other areas. The increasing demand on natural resources have lead to sharp increase in cost of energy, water and raw materials resulting in consequent increase in cost of production particularly in the food and beverage industry. There was a global food crisis due to shortage of food and sharp increase in food prices in 2008. The global food crisis was triggered partly due to the adverse climatic conditions resulting from climate change and global warming.

One of the best ways to tackle both the escalating cost of production and mitigating climate change is promotion of sustainable consumption and production (SCP) among SMEs. SCP focus

on sustainable use of natural resources through improvement of energy, waste and material efficiency and minimization of waste generation through reducing, recycling and reusing of waste. Therefore, the Ceylon Chamber of Commerce without limiting its SME development services to traditional SME services implemented the “Promotion of Sustainable Production among SMEs in the Food and Beverage Sector in Sri Lanka to assist SMEs to adopt best practices on SCP. The project was able to create awareness among 939 SMEs, trained 519 SMEs and supported 231 SMEs to implement a range of SCP practices in their production facilities. The project also trained 150 SMEs on international food safety standards and supported 75 SMEs to obtain international food safety standard, ISO 22000 and 4 SMEs to obtain ISO 14000.

Furthermore, this project was a true example of public private partnership. The CCC being a private sector business development organization with direct links with SME businesses and three local partners i.e. Industrial Technology Institute (ITI), Industrial Services Bureau (ISB) and Industrial Development Board (IDB) being public sector technical support services organizations, the close partnership among these four organizations and two international partners, IVAM Uva BV and Confederation of Indian Industry played a key role in achieving successful results.

Since the Promotion of Sustainable Production among the SMEs in the F & B sector in Sri Lanka has been able to achieve great success in delivering a range of very useful technical services to a large number of SMEs in a highly cost effective and efficient manner through a public private partnership, we strongly believe that this project should be selected as a finalist in the 8<sup>th</sup> World Chambers Congress. We also firmly believe that selecting this project as a finalist at the 8<sup>th</sup> World Chambers Congress will also help share this successful model and highlight the importance of replication of similar initiatives by Chambers of Commerce in other parts of the world.



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2012.01.21

Switch Asia Program,

Colombo.

Dear Sir

## **LETTER OF THANKING**

We are happy to let you know that Calton Sweet House has successfully awarded with the ISO 22000 Food Safety Certification.

Being in bakery industry for a short period of 21 years we were the first bakery to obtain ISO 22000 food safety certificate and we are grateful for the assistance your team has provide to us during this assignment. The Board of Directors and staff are thankful to the contribution you have made.

We are specifically thankful to the efforts of Mr. Saman Jayaratne who is the Senior Project Consultant for guiding and providing us consultancy services in reaching success.

Thank you.