Nestlé Creating Shared Value and Rural Development Report 2010

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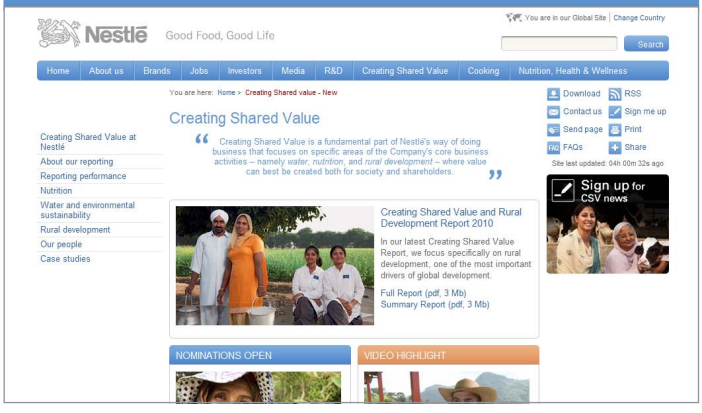

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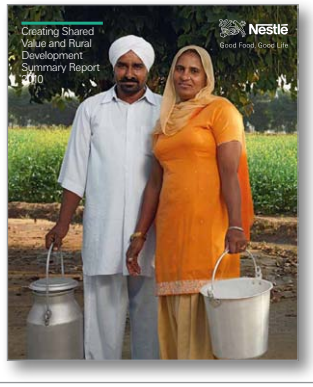

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Nestlé Creating Shared Value and Rural Development Report 2010

Introduction

Rural Development Key Performance Indicators

Nestlé has developed performance indicators to provide a focus for measuring and reporting Creating Shared Value, sustainability and compliance. This summary of KPIs of relevance to rural development is taken from our full KPI table, which forms part of our communication of progress on the United Nations Global Compact Principles. Unless stated otherwise, performance indicators are for the year ending 31 December 2010.

Creating Shared Value key performance indicator	2009	2010
Rural development		
Farmers trained through capacity-building programmes	165 500	144 900
Markets covered by Sustainable Agriculture Initiative Nestlé (SAIN) programmes	35	45
Direct procurement markets covered by SAIN programmes (%)	89	100
SAIN projects associated with water	10	12
Suppliers audited for food safety, quality and processing	3 864	3 345
Suppliers who received and acknowledged the Nestlé Supplier Code	165 497	164 969
Key vendors within scope of the responsible sourcing audit programme [(a)]	N/A	1 481
Key vendors covered by a responsible sourcing audit (%) [(a)]	N/A	66
Key vendors audited and compliant with Nestlé Supplier Code (%) [(a)]	N/A	56
Quality key suppliers approved through vendor approval process (%) [(a)]	N/A	61

(a) New in 2010.

Rural development impact of Nestlé's factories

	422 factories responding to survey[1] (%)	195 factories in developing countries (%)	144 rural[2] factories in developing countries (%)	51 urban factories in developing countries (%)
Sourcing from local/national supplier:				
Milk	28	33	38	22
Coffee	13	16	17	16
Cocoa	16	19	22	14
Training programmes in past five years:				
Literacy and numeracy	25	30	33	22
Entrepreneurship	26	33	37	24
Skilled trades	48	43	44	39
Formal apprenticeship	52	57	58	55
In past five years:				
Provided clean drinking water to local community	30	33	32	35
Contributed to local educational facilities	53	57	58	55
Invested in other local infrastructure	33	39	41	33
Nestlé-built water treatment plant	53	67	70	59

1. Based on survey conducted in autumn of 2010. Questionnaires were sent out to managers of Nestlé factories. 422 responses were received from 443 factories (95%). When calculating these figures, 21 factories were discounted: eight dairy factories in Latin America are joint ventures with Dairy Partners America; 10 factories were opened or acquired in 2010 and are not yet fully functional; and the responses from three pharmaceutical factories were not considered relevant to the CSV Report.
2. Our factories are defined as "rural" if: they were originally located in an area defined as rural by national statistics concepts; they are located in an agricultural region; they are not located in or within 5 kilometres of a large centre of population (above 100 000 inhabitants). Factories where the number of farms or other entities that directly supply our facilities with commodities exceeds the number of factory employees – such as our dairy factories – are also categorised as having a significant rural development impact. Using these criteria, 60% of our factories are in locations defined as "rural".

A message from our Chairman and CEO

It is our firm belief that, for a company to be successful over time and create value for its shareholders, it must also create value for society. We call this "Creating Shared Value". Based on strong foundations of compliance and sustainable business practices, this is our basic way of doing business. Given the nature of our activities and our ambition to be the world's leading Nutrition, Health and Wellness Company, we have identified three areas where Nestlé can in particular optimise the creation of shared value: nutrition, water and rural development.

In this report, we will focus specifically on rural development, which is one of the most important drivers of global development. With an estimated 70% of global poverty concentrated in rural areas, investment in building agricultural capacity is crucial, as the world additionally faces the serious challenge of providing food security for growing populations. Indeed, global poverty reduction efforts must focus increasingly on rural development.

Nestlé has been engaging with farmers and rural communities since its inception over 140 years ago. As early as the 1920s, we were building factories in rural areas in Brazil and South Africa; and creating milk districts to supply them. Today, we deal directly with nearly 600 000 farmers worldwide, affecting the lives of millions more by helping to create better living conditions for them – for example by establishing milk districts in over 30 countries, training farmers in animal husbandry, water and feed techniques; and extending about USD 45 million in financial assistance in 2010.

Today, we have 443 factories all over the world. Most of them are in rural areas and more than half are in developing countries. We have long been aware that they are magnets for development, creating a large skilled labour force in rural areas, but also educating small business operators who supply our factories, as well as facilitating the building of infrastructure such as roads and water treatment systems.

Specifically in 2010, we made significant new commitments in rural development. In addition to new factory investments in Indonesia, southern Chile, India, the Philippines, Sri Lanka, Mexico, Ghana and Equatorial Africa, we launched The *Nescafé* Plan, with substantial investments in coffee-growing regions worldwide. The *Nescafé* Plan takes a holistic approach to farming which includes:

- doubling the amount of coffee bought directly from farmers to 180 000 tonnes over the next five years;
- sourcing 90 000 tonnes of coffee according to Rainforest Alliance and Sustainable Agriculture Network principles by 2020;
- distributing hundreds of millions of high-yield coffee plantlets in order to raise quality and hence revenues to farmers.

Nestlé Chairman Peter Brabeck-Letmathe visits the Reta Grande dairy farm in Brazil, where Nestlé provides technical assistance and advice on farming best practice.

The *Nescafé* Plan follows closely in the footsteps of The Cocoa Plan, where we are:

- working closely with cocoa-farming communities, particularly in West Africa and South America, to improve their livelihoods, including access to schools for their children;
- putting our plant science expertise to work and distributing millions of high-yield, disease-resistant cocoa plantlets.

Together, The Cocoa Plan and The *Nescafé* Plan will see over CHF 600 million invested in these key rural development initiatives between now and 2020.

Meanwhile, the *Nespresso* AAA Sustainable Quality™ Program – a part of the wider *Nespresso* Ecolaboration™ platform – with high-quality coffee farmers in Latin America strengthened collaboration with a cluster of organisations, including the Rainforest Alliance. In addition, we have engaged in various bilateral and multi-lateral consultations with international organisations and NGOs such as the partnership with The Forest Trust (TFT) to ensure that Nestlé products do not have a deforestation footprint.

We know that all these are positive steps. But we also know that more has to be done. We are permanently challenging ourselves to look for answers to the many problems we are all facing together. In the following pages, we describe key challenges – from locating factories in rural areas, to the issue of child labour in agriculture, to deforestation. There has been good progress to date, but we need to continue our efforts, because there is still considerable work to be done.

Conscious that we do not have all the answers, we remain open to new ideas from outside stakeholders, and the Nestlé Creating Shared Value Advisory Board, comprised of global experts in nutrition, water and rural development, has given us invaluable outside perspectives and challenged us on where we can do better. Specific recommendations this year include increased advocacy to stimulate broad based investment in rural development, while continuing to raise serious concerns about issues such as the deforestation effects of biofuels.

As a global community, we are faced with the need to double food production by 2050, and Nestlé is committed to playing its part in a multi-stakeholder effort. We welcome your input and ideas, and hope that you find this report to be stimulating and informative.

Nestlé CEO Paul Bulcke attends a school in Peru, where the children learn about healthy eating in an enjoyable way through Nestlé's Crecer Bien programme.

Peter Brabeck-Letmathe
Chairman of the Board

Paul Bulcke
Chief Executive Officer

Global food security and rural poverty

Please note: *The views expressed in this article are the author's alone and are not necessarily shared by Nestlé. Its content has not been verified by our independent assurers.*

Global challenges and opportunities

The world demand for food is expected to double in the first half of the 21st century – with half of that growth coming from population growth (from 6 billion to 9 billion people) and half from growth in purchasing power of low-income consumers.[1] The world population is projected to grow between now and 2050 by 2.6 billion people. The current population of China is 1.3 billion, so the world's farmers are being asked to increase their production over the next 40 years by enough to feed two more "Chinas".

Projected population growth (in millions)

Region	2010	2050	Increase	Percent Increase
World	6 892	9 485	2 593	38
High-income countries	1 237	1 326	89	7
Low-income countries	5 656	8 159	2 503	44
East & Southeast Asia	2 168	2 425	257	12
South Central Asia	1 755	2 620	865	49
Sub-Saharan Africa	865	1 831	966	117
Latin America	585	729	144	25
North Africa & West Asia	444	708	264	59

Source: Population Reference Bureau. 2010 World Population Data Sheet.

About 40% of the world's population – 2.6 billion people – live on less than USD 2.00 per day, with 1.4 billion of them living on less than USD 1.25 per day.[2] About 925 million people lack sufficient purchasing power to access even enough calories to sustain a medium level of physical activity. Most hunger in the world is associated with lack of purchasing power. The rich in no country go hungry except in times of war, natural disaster or politically imposed famine.

Robert L. Thompson
Gardner Endowed Chair in Agricultural Policy Emeritus, University of Illinois in Urbana-Champaign, USA; member, Nestlé CSV Advisory Board

1 Already a decade into the 21st century, global food demand is projected to grow 70–80% by 2050. When the growing demand for agricultural commodities as industrial raw materials (including biofuels) is added to this, the world's farmers will likely need to double agricultural production in the next 40 years.

2 Per capita incomes of USD 1.25 and USD 2.00 are in purchasing-power adjusted dollars. They are corrected for differences in the cost of living in different countries, the largest component of which is food in the case of the poor.

Incidence of extreme poverty, 2005

Region	Less than USD 1.25/day (%)	Less than USD 2.00/day (%)
East Asia and Pacific	16.8	38.7
Eastern Europe & Central Asia	3.7	8.9
Latin America & Caribbean	8.2	17.1
Middle East & North Africa	3.6	16.9
South Asia	40.3	73.9
Sub-Saharan Africa	50.9	72.9

Source: World Bank.

Those on very low incomes spend a large percentage of their meagre incomes on food.[3] When their incomes start to rise, they spend most of the first increments on food – first to access enough calories to overcome hunger and then to upgrade the quality of their diets, including more fruit, vegetables, animal protein and edible oils. Successful poverty reduction has the double effect of achieving the humanitarian goal of reducing hunger but, at the same time, unleashing a disproportionately large increase in consumption of agricultural products.

Urbanisation also leads to changes in people's diets, which add to per capita consumption of agricultural products. In 2009, for the first time in the history of humanity, more than half of the world's population lived in cities. The share of the population living in cities is projected to reach 60% by 2030 and 70% by 2050.

The combined effects of population growth, broad-based poverty reduction and urbanisation are likely to cause global demand for food to double in the first half of this century. Will the world's farmers be able to double production to feed the world's larger population better than today at reasonable cost without damaging the environment?

Increasing agricultural production

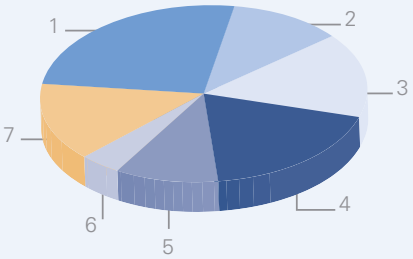
There are only two ways to expand agricultural production: increase the area planted or increase the production per unit of land, which may, where the climate permits, entail growing more than one crop on the same land each year. Farmers could double the number of hectares of land in production; however, there is only about 10% more potentially arable land that is not forested, highly erodible or subject to desertification.[4] Expansion beyond this would involve massive destruction of forests and, with them, wildlife habitat, biodiversity and carbon sequestration capacity, which would accelerate global warming. Most of the potentially arable land is inferior to that already in production and is located in remote areas of sub-Saharan Africa and South America where infrastructure is minimal. To sustainably double agricultural production will require that most of the expansion come from increasing the production per unit of land already in use.

3 The food consumed by those on low incomes tends to be mostly raw agricultural products with little value added between the farm where it was produced and the consumer. After one's income reaches a certain level, further increments to income add little to demand for raw agricultural products. After that point, what is spent on food from increments to income is spent on value-added after the raw product leaves the farm, eg convenience, packaging, processing and eating out in restaurants.

4 There are vast grasslands in regions of the world which are too dry for annual crop production, but which make a significant contribution to the world food supply in the form of meat and milk from ruminant livestock (cattle, goats and sheep).

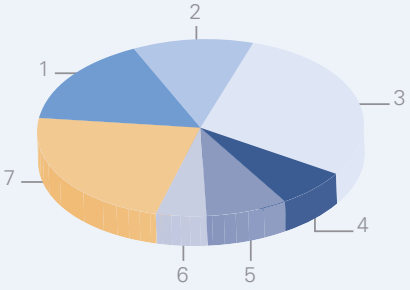
The availability of fresh water to agriculture may be an even greater constraint to doubling production than the availability of land. Farmers use about 70% of the world's fresh water. With more than half of the world's population now living in cities, there is no way the world's farmers will have access to 70% of the fresh water. Cities will outbid farmers for available water. Whereas farmers may have to double the average productivity of the land already in agricultural production, they may have to triple the "crop per drop", the output per unit of fresh water they use.[5]

Distribution of world population and arable land



Percentage distribution of arable land

1 OECD countries (25%)
2 Africa (14%)
3 East Asia and the Pacific (15%)
4 Non OECD Europe and Central Asia (18%)
5 Latin America and Caribbean (10%)
6 Middle East and North Africa (4%)
7 South Asia (14%)



Percentage distribution of population

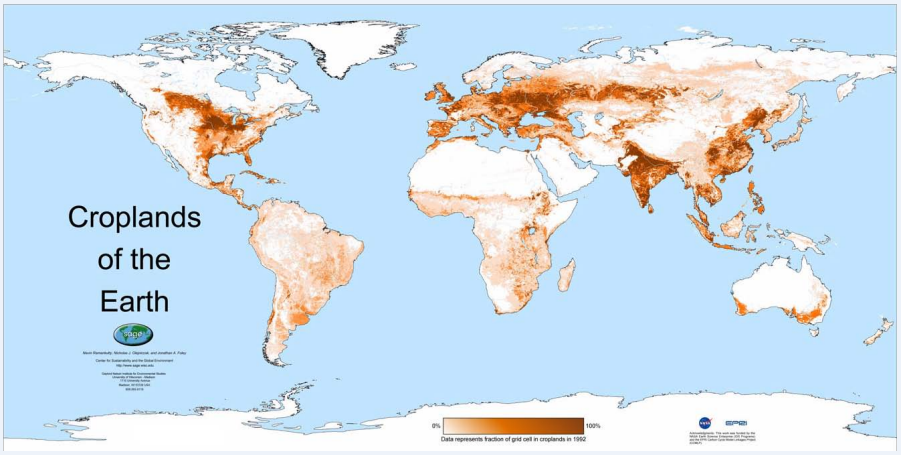
1 OECD countries (16%)
2 Africa (12%)
3 East Asia and the Pacific (29%)
4 Non OECD Europe and Central Asia (7%)
5 Latin America and Caribbean (8%)
6 Middle East and North Africa (5%)
7 South Asia (23%)

Source: World Bank. World Development Indicators.

East and South Asia have more than twice as much of the world's population than their proportion of arable land, and while the Middle East and North Africa has similar proportions, it lacks water for agricultural production. The population and income of these three regions are projected to grow significantly, placing greater demands on the world food system. Sub-Saharan Africa, with the fastest growing population, has similar proportions of arable land and population, and its relative abundance of land is one reason the land-scarce countries of Asia and water-scarce countries of the Middle East are interested in acquiring land there.

5 Most of the world's farmers pay nothing for the water they use, so they have little incentive to adopt water-saving technologies. It is politically difficult to start charging a positive price for water in a country where farmers have never had to pay anything for water, however this may become necessary in the future to achieve a tripling in the agricultural output per unit of water used.

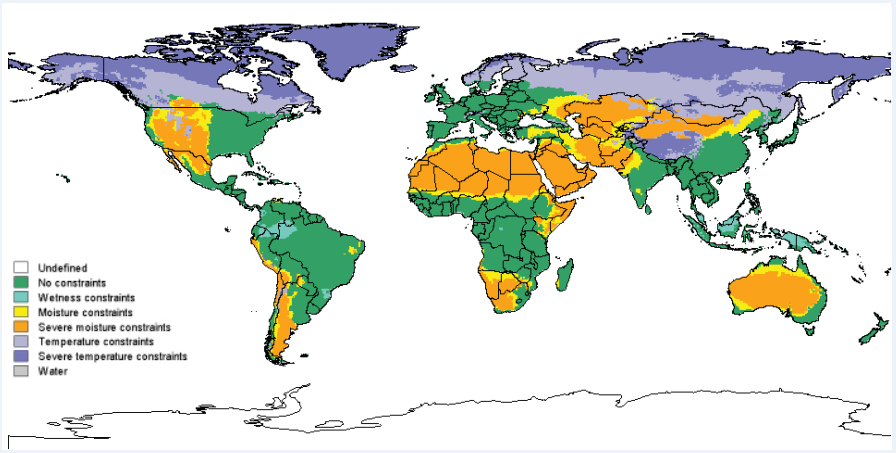
Croplands of the Earth



Source: SAGE, University of Wisconsin, Madison, Wisconsin, USA.

Most of the world's principal crop production regions (darker shading) lie in the northern hemisphere. South Asia, with the largest total population and the largest number of extremely low-income people, has some of the darkest shading, as do the densely populated regions of East and South-East Asia. In these regions, as well as in North America and Eastern Europe – two of the world's great grain baskets – most of the arable land is already in crop production. South America and Sub-Saharan Africa have most of the additional land that could be brought into production.

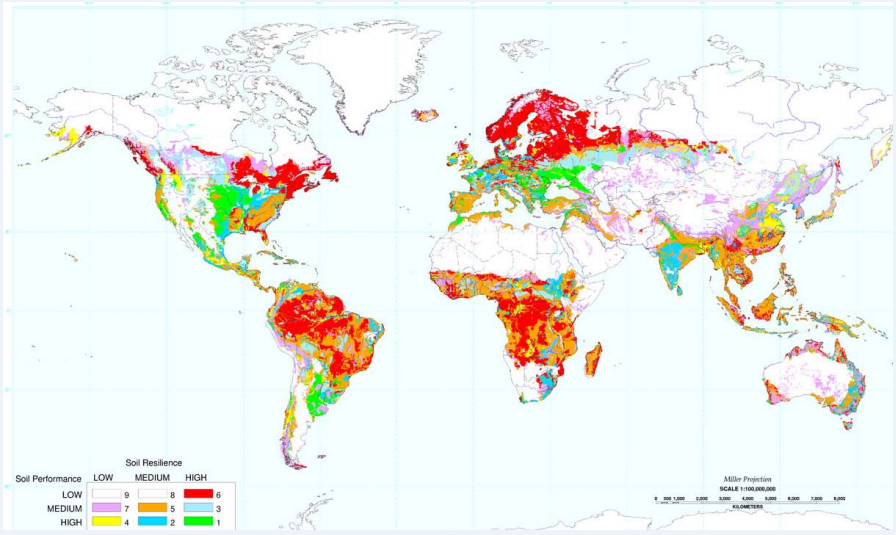
Climatic constraints on land in crop production



Source: International Institute for Applied Systems Analysis, Laxenburg, Austria.

Low temperatures and insufficient moisture constrain the land in crop production. Long-term climate change projections suggest that the average temperature will increase more in the high latitudes of the Northern Hemisphere than at the Equator. This should shift the margin of crop production further north into Canada, Russia and Alaska, expanding the area of potentially arable land in those countries. Long-term changes in the volume and timing of precipitation will also affect the extent and location of arable land in the future; however, the various climate projection models differ more on future trends in precipitation than in temperature.

Inherent land quality in regions without severe climate constraints



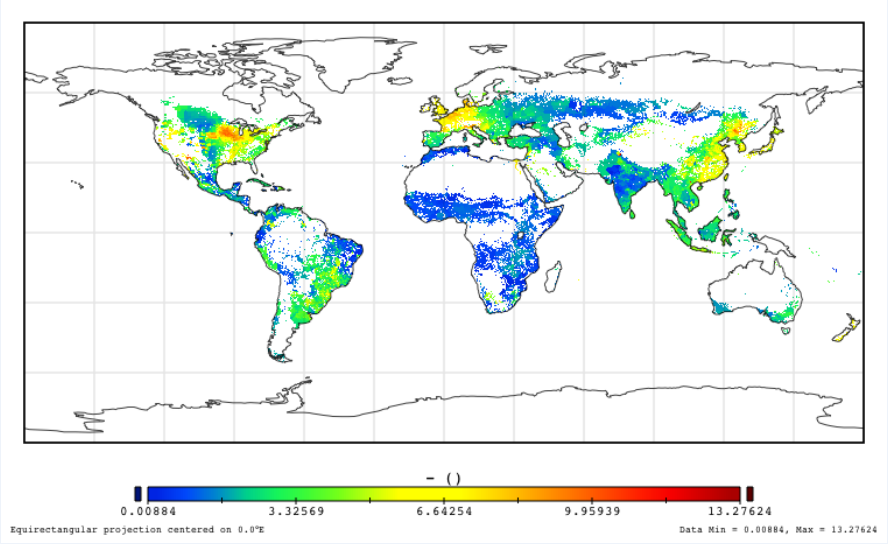
Source: Natural Resources Conservation Service, U.S. Department of Agriculture, Washington, DC, USA.

The inherent quality of the soil in regions without severe climatic constraints is categorised into performance (fertility) and resilience (resistance to erosion). The green areas – representing the soils with the highest performance and resilience – are seen in the Midwest of the United States, the Pampa of Argentina and the region north of the Black Sea. In the savannah region of Brazil (*cerrado*), where cropland was recently expanded, the soils have low–medium performance and medium–high resilience. They can be made very productive with purchased inputs, but have a higher unit cost of production. Most of the 10–12% "potentially arable" land is found in South America and sub-Saharan Africa.

Variations in crop yield

There are great differences among regions of the world in crop yields (agricultural production per unit of land) with the highest cereal grain yields in Western Europe, East Asia and the Midwest of the United States; yields of about the world average in South America, Central Europe, Southeast Asia and Australia; and low yields in sub-Saharan Africa, South and Central Asia, north-eastern Brazil and Central America. The wide differences in yield suggest that it should be possible to significantly increase productivity per unit of land. With their low yields, many low-income countries' farm sectors are contributing less to their national food supply and global food security than they could.

Cereal grain production per hectare



Source: SAGE, University of Wisconsin, Madison, Wisconsin, USA.

Illustrating the differences in the average yield of cereal grain production (in tonnes per hectare) across the world, regions range from very low per-hectare yields (dark blue) to the highest (dark red). The global average yields of the three main cereal grains – wheat, maize and rice – are 3.0, 5.0 and 4.25 tonnes per hectare, respectively, all of which fall in the green range of the colour spectrum. The yellow "mid-range" of the spectrum is approximately double the world average yields of principal cereal grains.

The large differences among regions in grain yields reflect differences in genetic potential embodied in the seeds planted; availability of water in the root zone of the plants from precipitation or irrigation; the adequacy of the nutrition available to the plants from the soil or fertilizer (organic or inorganic); and the effectiveness of control of weeds, insects, birds and disease that reduce productivity.

It is, of course, the farmer who orchestrates this whole process – after choosing what varieties of what crops to grow, attempting to achieve as much of the genetic potential embodied in the seeds as possible under the unpredictable weather conditions and pest infestations of each growing season. Farming is an inherently risky business with volatile agricultural commodity prices and crop yields. Farm revenue is the product of two random variables not under the farmers' control: price multiplied by yield.

Low household incomes

Most of the world's agricultural production is conducted on family farms on which members of the farm household provide most of the labour. In addition to providing part of the family's annual food supply, farming provides the household cash income – receipts from selling its products less what it has to pay for production inputs and hired labour.

Most of the world's farm households earn significantly less than households whose income comes from other economic activities. According to the World Bank, 75% of the extreme poverty and associated hunger in the world is in rural areas, and according to the UN Special Rapporteur on the Right to Food, 80% of the world's hungry are involved in food production. Low income is only one aspect of poverty. The World Bank's *Voices of the Poor* characterises poverty as "deprivation in well-being… To be poor is to be hungry, to lack shelter and clothing, to be sick and not cared for, to be illiterate and not schooled… Poor people are particularly vulnerable to adverse events outside their control." The majority live in remote rural areas, far from roads, markets, schools and health services.

Rural poverty and rural development

The objective of rural development in low-income countries is to reduce poverty and hunger, and improve the quality of life in general in non-urban areas, where the majority of poverty resides. Increasing productivity in agriculture is essential and will contribute to greater national food security and to the global supply of food. However, this is only part of rural development, which must also diversify the economic base of rural communities by creating non-farm earning opportunities.[6] This has an additional benefit to national economic development. The national income multiplier associated with increments to income in rural communities is higher than increases in urban residents' incomes.

Only the private sector can create enough jobs to solve the problem of poverty in low-income countries' rural or urban areas, however government needs to provide a positive investment climate before investments of either local or international capital will be made. There must be reasonable macroeconomic and political stability, rule of law, the minimum of corruption, definition and protection of property rights, and enforcement of contracts.

In addition, investments need to be made in a number of rural public goods – by the public sector, official development assistance (foreign aid) and/or international development bank lending. Investments in rural infrastructure, education, health and agricultural research and technology transfer are needed to solve the problem of rural poverty through development of agriculture and the rural non-farm sector.

Education and health

Education and health services are much less available in rural areas of most low-income countries than in their cities. Many areas lack safe drinking water and sanitation. Water borne diseases are rampant. Permanent stunting of mental and physical development from nutritional deficiencies of young children is common. There may be no locally available source of certain essential nutrients in the diet, for example vitamin A, iron, iodine or zinc.

Illiteracy is widespread among the farm population of low-income countries, particularly among women. Educating girls is one of the most effective ways to reduce the rate of population growth in low-income countries. More education of the farmers of the future facilitates adoption of improved agricultural techniques. Outmigration from agriculture to non-farm employment is far easier between generations than within any generation, yet educational opportunities are much more limited for rural than urban children.

6 Part of which may be adding value to raw agricultural products.

Rural infrastructure

Rural areas in low-income countries often have poorly developed infrastructure. The poor quality (and often lack of) rural roads impedes rural development by raising the cost of transporting goods and people to and from the area. Most improved technologies are embodied in inputs the farmer must purchase. High transport cost raises the cost of inputs and reduces the price farmers receive for the products they sell, making it unprofitable to adopt improved technologies that could otherwise increase their household income.

There have to be marketing institutions to supply farmers with inputs and to connect farmers to regional and national markets for their products. There is no benefit to a farmer increasing productivity or shifting to higher value per hectare crops if there is no market ready to buy the output at a remunerative price. Finding buyers for their products is a particular problem for smallholders who have only small lots of production to sell. Securing credit to buy inputs at planting time is a particular problem for smallholders who have little or no collateral to pledge against the loan, if credit providers exist at all.

Until recently, rural areas of many low-income countries have had few, if any, telecommunication links with the outside world. Markets do not work very well in an information vacuum, and their absence creates opportunities for unscrupulous middlemen to exploit farmers who have no way to know the prices in other markets. This has changed rapidly with the advent of the cellular telephone and construction of towers throughout many low-income countries. Lack of rural electrification has been a severe impediment to development of the non-farm rural economy and delivery of health care and educational services.

Agricultural research and technology

An important source of the large differences in crop yields per hectare observed across regions of the world has been public and private investments in agricultural research. These have increased the genetic potential of the varieties planted, improved understanding of crop nutrition and developed more effective and cheaper ways of controlling weeds, insects and diseases that reduce productivity below the genetic potential of the seeds planted.

A century ago cereal grain yields in Western Europe and the United States were little higher than those observed in sub-Saharan Africa today. The large increases in productivity since then have reduced the unit cost of production and kept the price of food lower, to the great benefit of low-income consumers who spend the largest fraction of their incomes on food. Moreover, this has made famine a rarity in the world and has allowed millions of hectares of trees to remain standing in the world's forests instead of being cut to make way for an expanded area under cultivation.

Agricultural technologies tend to be very location specific. The tools of agricultural research are highly mobile, but plant varieties need to be optimised for each local agro-ecosystem through adaptive agricultural research. With global climate change all agro-ecosystems will be shifting. There will have to be larger investments in adaptive research in every agro-ecosystem to sustain present productivity levels, not to mention the need to double the average productivity of the land already in agricultural production around the world.

Public investments in agricultural research and technology transfer played a large role in the agricultural development of the presently high-income countries that have high agricultural productivity levels today. The research results were made freely available, and publicly supported programmes of farmer education were created to encourage their diffusion. These investments benefitted farmers through higher household incomes and benefitted consumers through lower-cost food.

Investing in the future

The social rate of return on investments by the public sector in rural infrastructure, education and health, and in agricultural research is extremely high. In low-income countries 75% of the people in extreme poverty and hunger are in rural areas, and those countries' agricultural sectors are contributing less to their national food supply and to world food security than would be economically efficient and environmentally sustainable. Nevertheless, over the last several decades investments in agricultural and rural development by low-income country governments, official development assistance organisations and international development bank lending have declined to negligible levels.

Moreover, until recently the governments of many low-income countries, through policy interventions in markets, turned the terms of trade against their farmers, forcing them to pay more than the world market price for their inputs and receive less than the world market price for their output. This reduced the incentive for farmers to adopt productivity-enhancing technologies. This discrimination against farmers has been remedied in all parts of the developing world, except sub-Saharan Africa and Argentina, where it continues.

In the year 2000, the heads of state of more than 200 countries meeting at the United Nations adopted several Millennium Development Goals, the first of which was to reduce hunger and poverty in the world by half by 2015. Millennium Development Goal 1 cannot be achieved unless poverty and hunger are reduced in rural areas where 75% of it is found. Accomplishing this will require a greatly enhanced commitment to agricultural and rural development in those countries. With the projected doubling of global food demand in the first half of the 21st century, the world needs low-income countries with a history of underperformance in their agricultural sectors to contribute more to their national and the global food supply.

Reducing rural poverty

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Please note: *The views expressed in this article are the author's alone and are not necessarily shared by Nestlé. Its content has not been verified by our independent assurers.*

There are five ways for a poor farm household to increase its income other than from social welfare support, which rarely exists in rural areas of low-income countries:

- **increasing productivity** by growing varieties with greater genetic potential, irrigating crops if water is available, providing sufficient nutrients and controlling weeds, insects, birds and disease;
- **changing to higher-value crops** per hectare, replacing staples such as cereals, roots and tubers, with fruits, vegetables and livestock;
- **gaining access to more land** through purchase, rental or land reform, or other **income-generating assets**, eg, literacy, numeracy and specialised skills;
- members of the household **obtaining non-farm income**, by producing something at home for sale or getting alternative employment away from the farm;
- members of the household moving to **non-farm employment**, reducing the number of people trying to make a living on uneconomically small pieces of land and increasing the incomes of those who stay behind.

Other interventions external to any one farming household, such as investments in infrastructure, value chain linkages or national policies, contribute to improving the quality of rural life in general and may increase the prices received by farmers for outputs or reduce the price paid by farmers for inputs. These are addressed in both the previous and subsequent sections.

Increasing productivity

To increase the productivity per hectare of the crop(s) farmers grow, they can adopt improved varieties with greater genetic potential if they are available, supplement the water available from precipitation with irrigation if a supply of water is available, ensure that sufficient nutrients are available to the crop when it needs them (but not contributing to pollution by supplying more nutrients than the crop can use), and reduce losses by improving control of weeds, insects, birds and disease.

Higher-value crops

If farmers are getting as high a yield as possible from their crops using the best available technology, but their household income is still below the poverty line, the next alternative is to switch to a crop with a higher value per hectare. Staples such as cereal grains, roots and tubers, while important to the farm household's basic food supply, generally have low value per hectare, while crops like coffee and tea (and intensive animal production) generally have much higher expected value per hectare.

Gain access to more land

If farmers have only a small area of land, they may be producing the highest possible value per hectare crops using the best available technology, but their household income from agriculture is still below the poverty line. The third way low-income farm families can escape poverty is to gain access to more land through purchase, renting or land reform. However, there may simply be no more farm land available without destroying forests. In East and South Asia, for example, the average farm size is less than one hectare, and there is no crop that has a high enough value per hectare to lift a family out of poverty on so little land.

Obtain non-farm income

In regions where there is no more land available, the next alternative to lift the farm household out of poverty is for one or more members of the household to obtain non-farm source(s) of income. This may involve producing something at home for sale, for example weaving cloth, or one or more people working part time or full time away from the farm, either within commuting distance or far away and sending remittances back to the household. In every presently high-income country, the principal way most smallholders have escaped poverty is by becoming part-time farmers with one or more members of the household working outside of agriculture.

Move to non-farm employment

The fifth way for a low-income farm household to escape poverty is to cease farming and go into another line of work – either within the local community if jobs are available or in cities. Migration out of agriculture to non-farm employment is a normal and essential element of economic growth and poverty reduction. By reducing the number of people trying to make a living on uneconomically small pieces of land, outmigration creates the opportunity for both those who leave agriculture as well as those who stay behind to have higher incomes. In the normal course of economic development, first the fraction of the workforce and eventually the absolute number of people engaged in agriculture decline.

Rural to urban migration is driven principally by the desire of those who migrate to escape poverty and secure a better quality of life, at least for their children, than is possible within either agriculture or the non-farm economy of the community they left. To avoid urban problems of overcrowding, unemployment, crime and pollution associated with excessive rural to urban migration, it is essential to create more non-farm employment opportunities within the rural communities and smaller cities dispersed through a low-income country.

Read how Nestlé's initiatives support rural development here.

Nestlé's contributions to rural development

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Please note: *The views expressed in this article are the author's alone and are not necessarily shared by Nestlé. Its content has not been verified by our independent assurers.*

Nestlé has made many contributions to rural development that have created value for the suppliers of its raw materials and the communities where they live while, at the same time, creating value for its shareholders. Nestlé has contributed to poverty reduction and improvements in the quality of life in rural areas of a number of low-income countries, while ensuring an ample future supply of raw materials for its factories to satisfy the growing demand for food in the world. By so doing, Nestlé helps to ensure future food security at the household, national and global levels.

Committed to rural development

Two aspects of Nestlé's commitment to rural development are particularly impressive. The first is its long-term nature. There are no quick fixes to solve the problem of rural poverty. Success requires a sustained, long-term commitment. As evidence of this commitment, Nestlé has made major investments in factories in rural areas of low-income countries, even in places where it had to build components of the necessary infrastructure and train the workers to staff its plants.

Also noteworthy is Nestlé's commitment to linking small farmers into markets. It costs a lot to assemble small lots of often heterogeneous quality agricultural commodities from a large number of small farmers spread over a wide geographic area. Private sector marketing firms often refuse to deal with smallholders and, if they do, they pay a very low price to the farmer. Farmers cannot be expected to adopt improved technologies or start growing different commodities unless they are confident there will be a reliable market that pays a reasonable price for what they produce.

The most impressive contribution that Nestlé is making to rural poverty and hunger reduction has been with its smallholder dairy projects, which often involve women farmers. Nestlé – as a company whose roots lie in the development of dairy products – buys over 40% of the milk it processes directly from farmers, much of it from smallholders. When a dairy processing plant is built in an area, it creates a new opportunity for farm households to produce a new, higher-value product, which has the virtue of generating a stream of income throughout the year rather than just at one or two harvest seasons each year. Dairy projects have multiple benefits. In addition to increasing a farm household's earning potential, they have a particularly positive impact on the nutritional status of the children in the household. Nestlé advises its dairy suppliers on environmentally friendly systems of manure management, including the use of biogas digesters to provide energy to their homes for heating and cooking.

Increasing yields

Nestlé makes significant contributions to helping small farmers, including women farmers, increase the output from their limited resources, reduce any negative environmental impacts of their farming practices and improve the quality of their product so they can receive a higher price. This starts with Nestlé's world-class research facilities in Tours, France, and Abidjan, Côte d'Ivoire, and continues with field trials in the local agro-ecosystems where their plants are located. Nestlé employs a large number of technical advisors who provide training and consultation on cultural practices and farm business management practices to the farmers from whom it buys.

Nestlé scientists have found improved ways to control plant diseases which can severely reduce a farmer's production and, in turn, income. Nestlé produces coffee seedlings in a disease-free environment and supplies them to farmers to replace old, less productive, disease-prone coffee trees.

Nestlé has demonstrated a commitment to ensuring that the farmers who supply its raw materials produce in a manner which does not damage the environment by organising the Sustainable Agriculture Initiative (SAI) and participating in various sustainability certification schemes. In Colombia, Nestlé worked with coffee growers to replace their lower-yielding disease-prone varieties, centralised the washing process and offered farmers a premium price for delivering higher-quality coffee beans. By replacing the traditional approach to washing the coffee beans on the farm with a centralised washing facility, the quality of the coffee increased, the quantity of water used declined, environmental damage from the washing effluent was reduced and the coffee growers received a higher price for the higher-quality coffee beans they delivered to Nestlé – a win for the farmers, a win for the environment and a win for Nestlé.

Increasing productivity of crops

Another way Nestlé has contributed to poverty reduction, particularly in land-scarce countries, is by creating opportunities for farmers to produce and sell a higher-value product than the commodity they were previously growing. This may involve differentiating what had previously been considered a commodity such as has occurred in areas producing coffee for Nestlé's highly successful *Nespresso* business. To take an example from *Nescafé*, in Yunnan Province, China, Nestlé introduced the opportunity for farmers to produce coffee for that brand in an area with no previous history of coffee growing. Nestlé has helped farmers increase the value of the crop they produced by paying a premium price for higher quality.

Providing non-farm sources of income

Nestlé contributes to local economic growth in the communities where it builds plants in low-income countries by adding value to the raw agricultural commodities before they leave the area. Nestlé has the distinction of being the only coffee roaster with factories in most countries where it buys coffee beans. The factories add to the local tax base and increase resiliency of the local economy by diversifying its economic base.

By building food processing facilities in rural areas of low-income countries, Nestlé creates non-farm employment opportunities within commuting distance of many farm households, an essential building block for eliminating rural poverty. Many rural areas where Nestlé builds plants lack people with the requisite skills, and Nestlé provides training to local people so they can be hired in its plants. This increases the earning potential of the individuals trained. By expanding the local pool of skilled workers, Nestlé makes the area more attractive to other potential employers since many of the skills in which they are trained are readily transferable to other firms.

Nestlé's plants buy a lot of supplies and services such as transport, storage and packaging materials locally in the communities where its plants are located. There are numerous instances where no local supplier of some essential good or service existed in the rural community prior to Nestlé's arrival. Nestlé's opening a factory in a rural area often catalyses entrepreneurs to create new firms to supply the needed products or services. Professor Michael Porter has identified the lack of essential components of the "cluster" to be a major impediment to economic development. Where the "pull" from Nestlé's factories creates opportunities to fill out essential elements of the cluster in a rural community, it lowers the cost of other businesses locating in the area.

Financial considerations

Many improved agricultural technologies are embodied in inputs which farmers must buy. A major constraint on adoption is often the lack of an input marketing system to supply farmers with those inputs in a timely manner and at reasonable cost. Moreover, because there is a lag of several months or even several years between the time a farmer plants a crop and when it is mature enough to harvest, most farmers must borrow money to buy the necessary inputs at planting time which can be repaid only after the crop is harvested and sold. Frequently, in low-income countries, rural credit markets are weakly developed, and small farmers may have little or no collateral they can pledge to get a loan. In the absence of commercial agricultural input suppliers and credit sources, Nestlé has often acted as input supplier and credit provider so that the farmers who supply their raw materials could adopt improved technologies.

Nestlé has assured the smallholders of a market for their production and pays a premium for higher-quality raw materials. With commodity prices highly volatile and crop yields dependent on unpredictable weather conditions, a farm household's income from agriculture is the product of two random variables, price multiplied by yield. This makes farming an inherently risky business. The risk of a steep drop in income makes it difficult for low-income farmers who are living close to the margin of subsistence to innovate. In Thailand, Nestlé has provided small coffee farmers with a form of insurance against catastrophic drops in the price of their product. Nestlé assures the farmers of a minimum price and transfers the risk to others in the options market. The farmers are too small to avail themselves of this form of price insurance individually, but Nestlé in effect buys the insurance on behalf of all the growers from whom it buys.

Investing in transport and storage infrastructure

Moreover, many rural communities where Nestlé has built plants in low-income countries have lacked essential components of the infrastructure necessary for its plant to operate, to secure the necessary raw materials and to transport the finished products to markets. In an ideal world, the governments of the low-income countries, often with support from foreign aid donors or World Bank lending, would have made the necessary investments in infrastructure to catalyse private sector investments. In the real world, essential elements of the infrastructure are often absent.

There are numerous examples of Nestlé engaging with local stakeholders, farmers and authorities to influence the construction of essential infrastructure needed to link farmers in rural communities to markets; this has included water supplies, roads and even a bridge to link dairy farmers in Nicaragua to a Nestlé plant. Without a long-term commitment to rural development, few companies would make such investments in infrastructure, particularly when the purpose was to link smallholders to the market.

Significant losses of agricultural products occur in low-income countries between farmers' fields and consumers as a result of spoilage, rotting, insect and rodent infestations, and poor storage. Many agricultural products are excellent media for bacteria growth. Spoilage also increases the risk of food-borne diseases. West African farmers have a particular problem with infestations of a carcinogenic natural fungus (mycotoxins) in their cereal grains and oilseeds. Nestlé research helps farmers to alleviate this problem and the Company, which must have contaminant-free raw materials, is able to access them in the region.

Processing and packaging agricultural products close to the point of production can significantly increase food safety and the overall productivity of a country's food system. In a world in which land and water for agricultural production are becoming scarcer, we need to look for opportunities to increase productivity wherever in the food system it can be achieved.

Investing in water, nutrition and education

Nestlé has also made significant investments to improve the quality of life in the rural communities where it has located factories. Particularly noteworthy are its investments in education and in providing safe drinking water.

Water-borne diseases and parasites are rampant in rural areas of low-income countries. Diarrhoea from unsafe drinking water is a major killer of children in low-income countries, and intestinal parasites reduce the nutritional benefits which people derive from the food they eat. Significant health benefits from safer drinking water have accrued to many rural communities where Nestlé has located processing facilities.

Nestlé has contributed to improved health in rural areas through its "Popularly Positioned Product" (PPP) programme, by providing affordable sources of essential nutrients, such as iron, vitamin A, iodine and zinc, which are not readily available from local foods. An outstanding example is fortifying *Maggi* cubes with iodine in Central and West Africa, where good sources are not always available or part of the diet, and not all salt is necessarily iodised. Iodine deficiency between conception and three months of age can cause irreversible impairment to brain function and physical development in children.

Illiteracy and innumeracy, particularly among women, are much more widespread in rural areas of low-income countries than in their cities. To solve the problem of rural poverty and associated hunger, a significant number of children being raised on farms will need to find employment other than farming. Without at least primary schooling, few opportunities will be available. Furthermore, educating girls is one of the most effective means of bringing down fertility rates and slowing the rate of population growth. Fertility rates are higher in rural areas of low-income countries, and the fraction of girls attending school is much lower than for boys. There are strong economic reasons for educating both boys and girls. Many more rural youth need to complete secondary school as well so that they can compete successfully for admission to trade schools and higher education. Nestlé has demonstrated a commitment where it has built rural factories to strengthen the local educational system – to both its own benefit in having access to a more qualified work force as well as to the greater good of the community.

Creating Shared Value

Nestlé's investments in rural infrastructure, and in both the educational and health components of human capital, have made significant contributions to economic development and poverty reduction in the rural areas of low-income countries where it has plants. Most noteworthy is the long-term nature of Nestlé's commitment and willingness to make significant upfront investments to create the enabling environment that maximises the likelihood of success of its facility. Nestlé is also noteworthy in that it has sustained and increased its commitment to investing in agricultural and rural development in an era (since the 1980s) when investments by low-income country governments, official development assistance (foreign aid) and international development bank lending have all plummeted.

Nestlé recognises correctly that the growth markets of the future are in the presently low-income countries with rapid population growth. As those countries experience broad-based economic growth, which lifts the maximum number of people out of poverty, most of the early increments in income will be spent on food – first to get enough calories, then to secure a nutritionally balanced diet with sufficient vitamins, minerals and amino acids, and finally to demand added value in the form of processing and convenience. When the majority of the world's poor live in rural areas and most are farmers, focusing more attention on agricultural development and rural poverty reduction will both ensure future supply of raw materials to Nestlé's factories, but also accelerate poverty reduction and growth in demand for food products – truly an example of Creating Shared Value.

Read more about the five ways to reduce rural poverty and our Creating Shared Value Advisory Board's looking forward viewpoint.

Impact of Nestlé factories

All over the world, Nestlé factories are major engines for rural development and new environmental standards, especially in developing countries. Our principle is to source commodities, where possible, in the countries in which we have manufacturing facilities.

Today, roughly half our 443 factories are located in the developing world and of these, 60% – based on a recent sample of 422 factories (see 2010 factory survey below) – are located in rural areas.

What is a "rural" factory?

The UN Statistics Division observes that countries handle the definition of urban and rural differently, so mapping Nestlé's industrial presence in terms of its impact on rural areas is an inexact science. Nonetheless, we have defined our factories as "rural" if:

- they were originally located in an area defined as rural by national statistics concepts;
- they are located in an agricultural region;
- they are not located in or within 5 kilometres of a large centre of population (above 100 000 inhabitants).

Factories where the number of farms or other entities that directly supply our facilities with commodities exceeds the number of factory employees – such as our dairy factories – are also categorised as having a significant rural development impact.

Using these criteria, we calculate that 60% of our factories are in locations defined as "rural".

Factories in developing nations	**195**
... of which "rural"	**144** (74%)
Factories in developed nations	**227**
... of which "rural"	**110** (48%)

The rural development impacts of a factory

Nestlé's contribution to the rural economy extends from the very presence of our factories to the agricultural support and capacity-building farmer programmes we provide (as outlined in the following sections). Our facilities bring direct employment opportunities, greater access to Nestlé products for local consumers and other indirect economic benefits across the community – all without obligation or contractual commitment.

Moreover, in both our manufacturing sites and our interventions with farmers, our investment is sustained over the long term. We remain in communities – as a purchaser of locally grown agricultural commodities, employer, trainer and neighbour – for many decades, as many aspects of our impacts, such as building the capacity of local people to work in non-agricultural employment, take time and resources. This long-term, open approach helps to build trust and mutually beneficial relationships in the communities in which we operate.

A typical factory has touch points with a wide variety of aspects of society, from employment and infrastructure to environmental management, training and education. These effects are most prominent and noticeable in communities around factories in rural areas, where they help to bring positive developmental changes, but they are nonetheless present to some degree around all production sites, wherever they are located.

The typical rural development effects of a factory are summarised in the following graphic.

2010 factory survey

In the autumn of 2010, we undertook a survey to quantify and qualify the rural development impacts of our factories around the world. Questionnaires requesting the details of each site's employment, purchasing, environmental and community impacts were sent out to all factory managers, and we received 422 survey responses from 443 factories.

While some of the information from the survey has been used as illustrative examples on these pages, the rural development impacts of our factories can be summarised as follows:

Rural development impact of Nestlé's factories

	422 factories responding to survey[1] (%)	195 factories in developing countries (%)	144 rural[2] factories in developing countries (%)	51 urban factories in developing countries (%)
Sourcing from local/national supplier:				
Milk	28	33	38	22
Coffee	13	16	17	16
Cocoa	16	19	22	14
Training programmes in past five years:				
Literacy and numeracy	25	30	33	22
Entrepreneurship	26	33	37	24
Skilled trades	48	43	44	39
Formal apprenticeship	52	57	58	55
In past five years:				
Provided clean drinking water to local community	30	33	32	35
Contributed to local educational facilities	53	57	58	55
Invested in other local infrastructure	33	39	41	33
Nestlé-built water treatment plant	53	67	70	59

1. Based on survey conducted in autumn of 2010. Questionnaires were sent out to managers of Nestlé factories. 422 responses were received from 443 factories (95%). When calculating these figures, 21 factories were discounted: eight dairy factories in Latin America are joint ventures with Dairy Partners America; 10 factories were opened or acquired in 2010 and are not yet fully functional; and the responses from three pharmaceutical factories were not considered relevant to the CSV Report.
2. Our factories are defined as "rural" if: they were originally located in an area defined as rural by national statistics concepts; they are located in an agricultural region; they are not located in or within 5 kilometres of a large centre of population (above 100 000 inhabitants). Factories where the number of farms or other entities that directly supply our facilities with commodities exceeds the number of factory employees – such as our dairy factories – are also categorised as having a significant rural development impact. Using these criteria, 60% of our factories are in locations defined as "rural".

Our factories

Rural factories

The additional development impacts of our rurally located factories in the developing world are many and varied. For instance, Nestlé worked with the federal and state governments to develop our Feira de Santana Maggi factory zabout 150 kilometres from Salvador in Brazil, as well as to sift through the 50 000 job applications the factory attracted as the first non-farm employment opportunity for many people.

Although 40% of our factories are now defined as being in "urban" areas, they weren't necessarily always so. In some cases, their developmental effects over time have attracted businesses, investment and infrastructure into a "cluster" around them and made their once-rural locations increasingly urban or industrialised in nature. When it was first built, local people built their houses against the wall around the Nestlé factory in Moga, India while near Pannala in Sri Lanka, Nestlé's involvement began with the clearing of the designated site and construction of an access road.

Such a dynamic, positive effect takes time to evolve, but as rural factories expand, they offer more opportunities for contractors, suppliers and other businesses as well as employees themselves. For example, the "Rumo Seguro" programme coordinated by Nestlé, Fonterra and Dairy Partners of America has improved the safety performance of contractor drivers serving the dairy industry in several South American countries by 25%, by helping to set international standards of excellence regarding rest periods, safe behaviour, medical and alcohol testing, vehicle inspections and fleet maintenance.

The project led to the implementation of a similar road safety programme for the drivers that serve Nestlé Pakistan. Nestlé financed the construction of a purpose-built track, classrooms and high-tech simulator at the National Highway and the Motorway Police centre. Since 2008, when the training centre opened, 888 Nestlé contract drivers, as well as more than 500 drivers from 14 other organisations, have been trained and Nestlé-related road accidents have fallen by 40%. The programme also won the Gold Award in Nestlé's Workplace Safety awards in 2010.

Nestlé Pakistan has also helped to refurbish and equip a number of primary and middle schools through the Government's Adopt a School Programme and its water filtration plant provides clean drinking water to almost 5000 people.

Urban and developed world locations

Even when our factories are located in urban areas, they can have a significant development impact on the rural communities they source from. One example – our Kejayan factory in Indonesia – has, in partnership with the Indonesian non-profit organisation Yayasan Nurani Dunia, renovated the local State Elementary School; this is now used as a community learning centre. It has also donated books to other schools in the area, repaired the main road near the factory and donated 1000 trees for a reforestation project on World Environment Day 2010.

Such impacts are not confined to the developing world either. Even in the developed world, a factory can have a developmental effect on a rural community.

Driver Leonel López González and transport coordinator Enrique Lozano Muñoz at the Lagos de Moreno dairy factory in Mexico, which provides employment and invests in transport infrastructure.

For instance:

- in Maine, United States, our Nestlé Waters factory in Hollis runs a soup kitchen, organises litter collection in local parks and has funded the building of roads and sports facilities;
- Inofyta in Greece supplies water tanks to help combat fires in local forests;
- our Ludwigsburg factory in Germany runs a holiday programme for local school pupils;
- AUD 25 000 a year is donated to fund local projects through the Nestlé Community Environment Project by our Tongala factory in Australia;
- one of the world's largest ready-to-drink factories – our facility in Anderson, Indiana – is located in a rural area, and has proved to be a significant stimulus to the local economy, particularly since the decline of the US car industry in the region;
- in Russia, Nestlé's coffee factory in Timashevsk and the Purina PetCare plant in Vorsino have both brought about a significant advance in local supplier development and considerable local community involvement.

Going forward, we will be performing further analysis of our survey data to determine a more accurate and detailed correlation between the rural development effect of our factories and the value they create for Nestlé and its shareholders.

Read more about the rural development impacts of our milk factories and our factories processing other commodities.

Multi-stakeholder solutions

Naturally, not all our rural development impacts are purely as a result of Nestlé operations. Some arise from multi-stakeholder solutions, where we work openly in partnership with other organisations to leverage their capacity in certain situations. Our work with the UNDP in Pakistan, for example, involves a public–private partnership to deliver training and make financial assistance available to dairy farmers near our Kabirwala and Sheikupura factories, and we are working with WWF and other community partners to protect water resources, protect biodiversity and reduce the impact of palm oil plantations in Sabah, Malaysia.

CHALLENGE: Siting factories in rural areas

Having made a strategic decision to locate a factory in a particular location, and identified a site with suitable access to energy supplies, water, transport networks and capable, trainable human resources, the key to turning that goal into reality is the early engagement of, and communication with, the relevant local authorities and agencies. This not only builds confidence and trust, but ensures we comply with all rules, regulations and legislation, and gain a greater understanding of what the local community actually wants.

Aligning new food production processes with the needs and culture of those who live in those locations also remains a challenge. This is especially the case where a new state-of-the-art factory is sited in an area dominated by small villages, poor sanitation and limited infrastructure.

Employees who are used to different ways of doing things often need ongoing support to ensure they can make the adjustments needed to either maintain Nestlé's standards and legal requirements (local, national and international) at work or to avoid becoming isolated and detached from the rest of their community when they go home. When this is achieved, however, their transferrable skills may take them on to even better or higher-paying jobs, with Nestlé or elsewhere.

Related news and features:

Nestlé invests CHF 67 million in South Africa

Nestlé invests CHF 150 million in the Equatorial African Region

Nestlé creates 500 new jobs in Egypt

New investments reaffirm Nestlé's commitment to India

Nestlé to invest another USD 100 million in Indonesia

Milk

The dairy industry is one of the most powerful engines for rural development, and the majority of Nestlé's rural factories are within our milk districts.

In 2010, 87 of our 254 rural factories were linked to our milk business and of these, 62% were located in developing countries.

For example, our Moga factory in India is located close to a large urban centre, yet its rural development impacts are none the less impressive. In addition to 1400 full-time equivalent employees, another 4000 people benefit from local employment opportunities as contractors and agents for milk collection and chilling centres, and a number of other local firms provide transport, packaging, cleaning, security and engineering services. Around 110 000 dairy farmers benefitted from the income raised from selling 323 767 tonnes of milk to the factory last year, and suppliers of other ingredients, such as sugar, wheat flour, fruit and vegetables, spices and honey, are also guaranteed a route to market.

Case study

Dairy development and biogas projects – Indonesia

SUPPLY AND DEMAND: Our Kejayan factory in Indonesia receiving deliveries at its milk reception.

In the East Java milk district, around 32 000 dairy farmers supply milk to Nestlé's Kejayan factory through 31 dairy cooperatives. With support from our Milk Procurement and Dairy Development Department, they have been able to improve their dairy farming practices to increase productivity and command a premium for higher-quality milk. The initial focus for productivity improvement was on improved fodder, feed and animal health. The partnership has also benefited other villagers who obtained employment in the production process ranging from cooperative managers to grass collectors.

In addition, Nestlé is currently operating two biogas projects. A three-year partnership with the Humanist Institute for Development Cooperation (HIVOS) is helping dairy cooperatives gain access to biogas units to convert methane from their cattle's manure into useable energy. We facilitate access to financial assistance, while HIVOS constructs the biogas units and provides training, and the aim is to set up 8000 biogas units in total.

Where the Nestlé/HIVOS project is not active, another smaller project has been set up with farmers supplying the Kejayan factory, to reduce their impact on the environment – and particularly on water resources – and to save energy at a household level, Nestlé has set up a fund to provide dairy cooperatives with 50 small biogas units and 10 larger units. The renewable energy (methane) they create is made available to dairy farmers.

An estimated 8300 people will initially benefit from these two projects but our aim is to ultimately extend this project to all dairy farmers in the region.

Case study

Water and sanitation education – Sri Lanka

According to the World Bank, only one in 10 Sri Lankan households has water on tap and every fifth person relies on rivers, streams and other unprotected water sources for their drinking water. To help rural communities gain access to drinking water, Nestlé Lanka has financed clean drinking water facilities in villages located near its manufacturing operations since 2006. These water fountains are complemented by awareness campaigns, water education programmes and competitions to teach schoolchildren about the importance of safe drinking and water conservation.

In addition, Nestlé Lanka's School Sanitation Project develops basic facilities such as toilets in the schools surrounding its Kurunegala factory. Facilities at the Napokuna, Galewela and Pannala primary schools have been upgraded, and these healthier, cleaner environments will benefit generations of students in the years to come.

Local schools in the surrounding villages near our Moga factory in India have been the subject of similar programmes. These have:

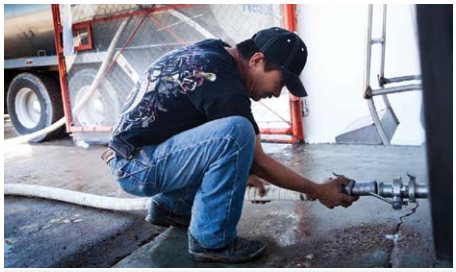
- provided 113 drinking water fountains in schools close to the factory, benefitting almost 4 000 students, complemented by information about water scarcity, conservation and pollution;
- improved the sanitation facilities in nearby girls' schools, encouraging many girls to continue with their education;
- educated 362 secondary school girls about nutrition, in conjunction with the Punjab Agricultural University, through 28 344 hours of nutrition training.

WATER EDUCATION: Nestlé's Harmandeep Kaur leads a water awareness programme at a primary school in Bilaspur village, near our Moga factory in India.

Case study

Biogas production – Mexico

In Mexico, Nestlé collects fresh milk in several dairy production areas where biogas digesters have been built to capture methane from cows and use it as energy. For example:



MILK TO GO: A tanker driver filling up with milk from Rancho El Mezquite in Mexico.

- one biodigester at the El Crotalo stable in the Torreon milk district processes on average 1200 m^3 of methane daily from nearly 2400 cows;
- in the Querétaro milk district, three biodigesters process 2400 m^3 of methane daily, which is expected to reduce electricity consumption by 90% at the farm where they are operating;
- the 800 m^3 of methane produced by La Torreña Agroindustrias will halve its electricity consumption.

Additional biogas plants are under construction as a result of the sustainability analysis at farm level (RISE assessment). In 2011, we project that around 35% of the milk supplied for Nestlé in Mexico will come from dairy farms with biogas plants.

Related CSV films and case studies:

Fostering development in Mexico

Environmental and water management, Colombia

Maloka Nutrition Education, Colombia

Fundación Nutrir, Colombia

Related news and features:

Nestlé boosts Chilean dairy sector with USD 100 million investment

Coffee, cocoa and other commodities

The remainder of our rural facilities are linked to the processing of other commodities, including coffee, cocoa, cereals, vegetables, fruit and spices. Ninety of these are located in developing countries (see below).

Like our dairy factories, these plants help to drive socio-economic development in local economies, through direct and indirect employment, training and education, infrastructure and community investment.

Commodity	Factories in rural locations	Factories in developing countries	Factories in rural locations + developing countries
Coffee	78%	59%	44%
Cocoa	79%	58%	47%
Cereals	63%	58%	40%
Vegetables/fruit	64%	53%	41%
Other	67%	58%	47%

Environmental benefits

In many countries, Nestlé was the first company to set up a wastewater treatment facility. While these investments have added to production costs in the short term, they have raised expectations and led to stricter regulations over time, thus levelling the playing field and giving Nestlé a competitive advantage.

We have used spent coffee grounds as a renewable energy source for many years, and at the same time, benefitted from a reduction in waste. Currently, 21 Nestlé factories use spent coffee grounds as a renewable energy source. One of the most recent facilities to make this investment, the Cagayan de Oro *Nescafé* factory in the Philippines, uses a state-of-the-art boiler to recycle and burn spent coffee grounds and other biomass such as sawdust and coconut shells. In 2010, the emissions associated with the combustion of fossil fuels fell by 62%. The factory also has a solid waste management programme and a communal eco-garden, which sells recyclable materials made from household waste and organic fertilizer made from biodegradable waste.

Discarded coconut shells are used as a source of renewable fuel for the boiler at the Nanjangud factory in India.

Direct and indirect employment

Our manufacturing plants naturally bring direct employment to local people, such as our ready-to-drink facility in Anderson, Indiana, which has been a significant stimulus to the local economy since the decline of the US car industry in the region. We have also generated 25 000 indirect jobs in Chiapas state, Mexico, where our renovated Chiapa de Corzo *Coffee-mate* factory is located. In addition, a CHF 150 million investment in Equatorial Africa over the next three years will see new factories built in Angola, the Democratic Republic of Congo and Mozambique, and existing factories expanded. Nestlé will also increase its distribution capacity in the region with 13 new distribution facilities and 750 new jobs by 2012, more than doubling its workforce.

Other indirect benefits to the communities around our factories are also evident.

For instance:

- thanks to a project delivered in partnership with the NGO Gawad Kalinga, 50 disadvantaged families live in a Nestlé-built eco-village in Lipa City where rainwater is recycled, reed bed technology processes sewage without the use of chemicals and Nestlé-sponsored educational activities and livelihood programmes are delivered;
- at our Antigua factory in Guatemala, staff helped to reconstruct buildings after an earthquake and have provided 350 schoolchildren with a glass of *Nido* milk and a bowl of *Maggi* soup every day since July 2007;
- following the earthquake in February 2010, our factories in Chile assisted communities by supplying water, providing access to electricity and using their gyms and social areas as shelters and stores for people's belongings.

Case study

Local sourcing and environmental improvements – Ghana

A CHF 36.2 million investment in our *Cerelac* infant cereal production plant in Tema, Ghana, will double its production capacity and foster rural development by sourcing more locally produced rice, wheat, flour and sugar from local Ghanaian suppliers.

Nestlé agronomist Klutse Kudomor (left) with farmer Nefisa Abdulai, whose grain is checked for mycotoxin levels at our infant cereal factory in Tema, Ghana (below).

The state-of-the-art facility is an extension of the existing Nestlé Tema site, and was officially opened in September 2010. Nestlé Ghana aims to double its capacity to 18,000 tonnes of infant cereal per year, having increased production to 9,000 tonnes already. The plant is also equipped with the latest food processing technology, which will reduce fossil energy consumption by around 15%, while the new chillers use natural refrigerants to lower both emissions and production costs.

This production facility is closely connected to Nestlé's Grains Quality Improvement Project, which is designed to ensure our factories receive a steady supply of safe, high-quality agricultural commodities, and allows rural communities to generate higher incomes as a result.

Case study

Gender empowerment and ecological housing – The Philippines

GROWING BUSINESS: A woman plants seedlings at the Nestlé Experimental and Demonstration Farm in Tagum, The Philippines.

When Nestlé built a manufacturing plant in Barangay Bagong, Lipa City, many of the local unemployed women in the neighbourhood wanted to work in the factory as it was near to their homes and families. Those with basic sewing skills were sent to the Technical Education and Skills Development Authority (TESDA) by Nestlé for formal training, and given small sewing jobs that helped them obtain a start-up business loan from a local bank. The Cut and Sew project soon started taking on bigger jobs for the factory, such as uniforms, lab coats, hairnets and shoe covers, and this has now grown to around PhP 1.5 million (CHF 33 000) worth of business every year at the factory. The factory also has a Yard and Garden project, where women produce cut flowers and organic vegetables in a plot of land within the premises. Nestlé provided the start-up finance, planting materials and training, and the women sell their produce to the factory canteen, and even rent out the ornamental plants to the factory and individual employees.

Through Gawad Kalinga, an NGO housing programme for the poor that is funded by private donors, Nestlé has also set up an eco-village in Lipa. Here the homeless and unemployed can start a new life in a location designed for ecologically sustainable living. Around 50 families have settled in the village, which has gone beyond merely providing housing structures to create a community where rainwater is recycled and reed bed technology processes sewage without the use of chemicals. The partnership has seen Nestlé employees volunteer by painting houses, sharing wellness tips and teaching.

Related CSV films and case studies:

- Productive Hands Cooperative
- Livelihood Workshops
- Technical Skills Training Programme
- Greening the Supply Chain
- Solid Waste Management Programme
- Environmental Programme for School Children
- The Carbon Credit Project

Related news and features:

- Nestlé opens new CHF 87 million *Maggi* factory in Nigeria
- Nestlé opens new USD 136 million factory in Dubai
- CHF 60 million investment for Nestlé factory in Russia
- New EUR 5 million Nestlé Waters factory opens in Poland
- Nestlé opens renovated *Coffee-mate* factory in Chiapas, Mexico
- Nestlé inaugurates its CHF 36.2 million infant cereal plant in Ghana

Impact of Nestlé farmer programmes

In contributing to rural development, including the five ways to increase farm household incomes described earlier by Robert L. Thompson, Nestlé considers two approaches to be the major growth engines for rural areas.

One way is investing in new factories in rural areas, which create rural infrastructure and non-farm employment opportunities. This is discussed in the impact of Nestlé factories section.

The other approach is to strengthen our efforts to link farmers and smallholders to markets through efficient supply chains. In this way, quality improves, supply is ensured and higher margins at the farm level are obtained, thereby generating cash flow into rural areas. This section explores this approach in more detail.

Our sourcing profile

Nearly 52% of Nestlé's raw materials expenditure goes towards the procurement of three key commodities – milk, coffee and cocoa – as detailed below. We also source a wide variety of other commodities, such as fruit, vegetables and cereals, some of which are sourced directly from farmers, while sugar, oil, meat, spices and other ingredients are often sourced through trade.

In total, we are supplied directly by more than 556 000 farmers.

	2009[8]	2010[9]
Milk[7]	12.18 million tonnes	11.63 million tonnes
Coffee	0.78 million tonnes	0.82 million tonnes
Cocoa	0.35 million tonnes	0.38 million tonnes

To adapt our approach to suit different countries around the world, Nestlé's 1014 agronomists and 17 273 support staff and contractors offer support, training and technical assistance to the farmers who supply us, and maintain ongoing dialogue with them, as well as with government agencies and NGO partners. Combined, this contributes to poverty reduction and rural development on a large scale, and creates significant, long-term value.

In 2010, 144 900 farmers around the world were trained through Nestlé capacity-building programmes [**KPI**] (2009: 165 553). There are no conditions attached to the technical assistance, advice and support we give to our suppliers, and the 556,600 farmers who currently supply Nestlé directly are in no way obliged to do so.

Over the long term, we seek to increase the training and support we provide to farmers. In general, such input – focused mainly on the efficient use and conservation of water, land conservation, access to clean water for farming communities, improving the status of women in rural communities and improving education – leads to greater yields of higher-quality and more varied crops for Nestlé, and increased income and higher standards of living for our suppliers.

We also continue to provide financial assistance, and assisted 32 036 farmers with loans totalling CHF 45.3 million in 2010.

In total, around four million people around the world benefit economically as a result of Nestlé's commercial operations.

7 Total fresh milk equivalent
8 Performance figures are for the year ending 31 Dec 2008
9 Performance figures are for the year ending 31 Dec 2009

CHALLENGE: Child labour in the agricultural sector

The International Labour Organization (ILO) estimates that 132 million children aged 5–14 work in agriculture around the world. In industries such as cocoa and coffee, smallholder farmers face many pressures. The root causes of child labour are poverty, low incomes, inadequate infrastructure and lack of awareness. In Côte d'Ivoire, for example, where we source much of our cocoa, over 50% of farmers have not had a primary education. Schools are often far from villages and where they do exist, lack capacity. Child labour is unlikely to be totally eliminated but at Nestlé, we can make a contribution to reducing its incidence in our supply chain.

As a founding participant in the International Cocoa Initiative (ICI), Nestlé is helping to address child labour and its causes, and improve access to education. For example, a new anti-child labour initiative with the ICI will support 20 communities in Côte d'Ivoire that supply cocoa for our confectionery business.

Nestlé recognises that child labour is an issue that also concerns other agricultural commodities. Using our RISE (Response-Inducing Sustainability Evaluation) tool, we have already made labour conditions assessments in around 200 dairy farms, covering production systems that represent 70% of our milk supply. In coffee, we address the issue of child labour under the *Nescafé* Plan. Beyond this, we will continue over the next two years to assess a range of social and environmental factors including child labour in other commodities' supply chains. This includes assessments at farm level and action plans with suppliers and their supplying farmers.

We also recognise that, in addition to individual actions along the supply chain, companies, governments and NGOs need to work together to create the conditions to effectively address the root causes of this issue.

Related news and features:

Nestlé leads call to accelerate sustainable agricultural growth

Milk

In terms of value of products sold, Nestlé is the world's largest milk company, sourcing almost 12 million tonnes of fresh milk equivalent from more than 30 countries in 2010. Our approach involves the widespread use of our milk district model, which dates back to the 1870s. The essence of the model is to work directly with smallholder dairy producers and cooperatives to build a supply chain.

The milk district model

As a highly perishable item, fresh milk needs prompt and efficient collection from farmers for use by consumers and manufacturers. Traditionally, rural milk collectors acted as middlemen between millions of dairy farmers – both subsistence and commercial in nature – and the consumer. However, due to long distances and a lack of storage facilities, milk produced at a distance from major urban centres was hard to access.

Nestlé purchased 3.4 million tonnes of fresh milk directly from farmers, and 1.44 million tonnes from third parties, in 2009. This helped to ensure a higher, more rewarding price for their milk, regular payment and a sustainable link to the processing industry, and providing Nestlé with a regular supply of high-quality milk with which to meet consumer demand. Nestlé's close relationships with farmers mean we can advise them continuously on the quality of milk production. We also have the same stringent quality control system in place across all our factories around the world, and more than 70 different tests are routinely conducted when producing infant formula and other milk products to ensure the highest-possible quality and avoid the risk of contamination.

Our direct milk sourcing programmes help to address rural development and poverty in many developing countries, including Pakistan, Brazil, Mexico, Chile, India and China. In addition to a secure market for their milk, communities benefit from local collection, storage and chilling facilities, more reliable transport networks, training and technical assistance by Nestlé specialists (agronomists and veterinarians), and field technicians to improve their produce and their farming practices, quality control systems and access to financial assistance to expand their operations. Further local employment opportunities at our factories are also created.

Milk districts in action

In Pakistan, for example, there are 10 million farming families, of which 7 million (approximately 35 million people) live in the Punjab, one of Pakistan's largest milk-producing areas. However, many of them are landless farmers with only a couple of cows or buffaloes, and a lack of training, infrastructure and financial support has created poor living conditions and low social standing across the sector. This is particularly so for women livestock workers, who make up 48% of the farming community, yet have little contact with the few (male) veterinarians in the province and lack the knowledge to treat many common conditions. But by developing the dairy sector, local communities are now less vulnerable to food insecurity, and many women farmers have become self-employed farmers who not only earn a livelihood but provide additional services to their communities. See the case study on Kabirwala.

In recent years, Nestlé has also invested approximately INR 500 million (CHF 11 million) in storage tanks, chilling centres, veterinary aid and other dairy development projects for the farmers in Moga, India. Our milk factory collects over 887 tonnes of milk per day from around 110 000 farmers, and works with them to improve their yields through improved farming methods, better irrigation, and scientific crop management practices. In this vibrant milk district, company veterinarians and agronomists advise dairy farmers on a range of issues, provide assistance with artificial insemination and subsidise the purchase of equipment.

Additional programmes have focused on technical support on irrigation techniques, rainwater harvesting and water management on dairy farms; the supply of clean drinking water in local schools; and the promotion of sanitation and hygiene in the villages that surround the factory. Read more about the impacts of our Moga factory.

CHALLENGE: Manure management and biogas production

Nestlé's Shuangcheng milk production facility, established in 1987 and located in Heilongjiang Province, north-east China, is one of the largest of its kind in Asia, and the fourth-largest in the Nestlé Group in terms of annual dairy production. On average, we purchase around 430 000 tonnes of milk a year from farmers in Shuangcheng and, as with our other milk districts, we build direct relationships with them, providing technical assistance, new technology and more than 300 free training sessions every year.

Our Shuangcheng milk operations have grown rapidly as China's demand for milk products has risen. This provides unprecedented income-earning opportunities for local dairy farmers, but also raises environmental problems such as manure storage. Currently, most farmers compost their own cattle manure and apply it to their fields in the spring and autumn as fertilizer. But, as observed in a study conducted by the Swiss College of Agriculture, the growing number of cows in Shuangcheng has made the potential contamination of groundwater supplies an issue.

Because most manure storage systems require considerable investment without immediate financial returns, local farmers have little incentive to construct proper animal waste storage. Nestlé has therefore financed a low-cost solution: biogas digesters in which farmers can collect the methane emitted from manure as energy for home cooking, lighting and heating. Biogas production not only provides farmers with an economic incentive to manage their manure more effectively to reduce water contamination, but the simple technology also helps them to reduce their wood and charcoal consumption, saving money, and reducing their household emissions.

In support of an initiative by the local authorities, Nestlé agronomists trained farmers to handle and store farm manure safely, and 7265 small biogas digesters have been installed across the Shuangcheng milk district. Demand for the technology (replicated in other countries such as Indonesia) has been stimulated by education and outreach programmes delivered at local demonstration farms. Three larger biogas digester plants – around 100 m^3 in size – were installed in 2010 to test their effectiveness at a community level.

Case study

Dairy development – Sri Lanka

Nestlé Lanka procures an average of 104 tonnes of milk every day from 14 000 local dairy farmers, and has supported the Sri Lankan dairy sector since 1982. Rural milk collecting points and chilling centres were first established close to our Kurunegala factory in the north west, but since 2009, we have almost doubled the number of collection points to 1200.

FRESH IDEAS: A dairy farmer in Sirimangalapura Sri Lanka, milks her cow.

Even during the country's civil war, Nestlé remained active in northern Sri Lanka, operating four chilling centres at the edge of the government-controlled areas which are supplied by collection points further north. In 2010, Nestlé Sri Lanka was able to extend its milk collection to the resettlement areas, providing a stable market and much needed income for those dairy farmers returning to the area. Four new chilling centres have been set up in the war-ravaged north of the country since June 2010, reflecting our ongoing commitment to developing the country's dairy sector and accelerating economic development and prosperity in rural communities.

Under traditional dairy farming practice in this region, cattle are free to graze on what they can find naturally, but as many dairy farmers had to leave their livestock behind when they fled, the area has a lot of free-roaming cattle. Productivity is extremely low – an average of 1.5 litres of marketable milk per cow per day – so not surprisingly, despite possessing an estimated 40% of the country's cattle, the north and east together produce only 22% of the nation's milk.

In addition to milk collection and chilling facilities, Nestlé is helping farmers to improve the quality of their herds through breeding with stud bulls, artificial insemination and the cultivation of green fodder.

Case study

Farmer training and flood relief – Kabirwala, Pakistan

The Rural Poverty Reduction Through Livestock Development Project, launched in March 2009 and co-funded by Nestlé Pakistan and the Swiss Agency for Development and Cooperation (SDC), offers dairy farmers training, technical assistance and veterinary services, and links with local businesses.

TECHNICAL ASSISTANCE: Dr Maria Mubarak, dairy hub manager (right), with Naseem Akhtar, a livestock worker and village milk collection agent in Pakistan.

Nestlé Pakistan has built two demonstration and training farms in the province. Under our Farmers Development Programme, over 4000 farmers have been trained and are part of the milk value chain.

Community Empowerment through Livestock Development and Credit (CELDAC), a public–private partnership between UNDP-Pakistan and Nestlé Pakistan, involves the three-year project teaching rural women about livestock healthcare and giving them access to financial assistance. Around 60% of the 3400 women trained now work as self-employed livestock managers, milk collection agents and animal feed suppliers, and more than 600 have direct links with the dairy industry.

In August 2010, floods across north-west Pakistan killed more than 1600 people. The Company's financial support of CHF 700 000 has brought food and relief to more than 50 000 people and funded the vaccination of 300 000 animals.

In addition to Nestlé's regular flood relief efforts, a joint project was also developed in collaboration with the SDC, where we committed CHF 440 000 in money and resources to benefit 10 000 people in southern Punjab. This comprised basic rations, feed concentrate, vaccinations and veterinary support for 14 000 cows and buffaloes, and seed and fertilizers for both crops and grazing pasture. This response exemplifies how our approach supports long-term reconstruction and enables capacity-building.

Case study

"Silvopasture" dairy farming – Colombia

Caquetá is a poor region of Colombia near the Amazon basin, and Nestlé has had a relationship with the dairy community there for around 35 years. However, in recent years, the security situation has deteriorated, with armed attacks on premises and personnel, and tankers being set on fire, all of which have affected dairy production in Caquetá.

DAIRY FARMING: Nestlé advises cattle farmers in Caquetá, Colombia, on environmentally sustainable farming practices.

Despite the history of conflict in the region, we are aiming to increase fresh milk production levels and introduce environmentally sustainable practices; to do this, we are working with 13 pilot cattle farms to gradually introduce "Silvopasture", a system that enhances biodiversity and reduces soil erosion by combining pasture land with other trees and shrubs. This results in improved milk quality and quantity, and therefore greater profits.

The "Silvopasture" project – part of our Dairy Development Plan – is currently in its first phase, with 234 acres across the 13 farms undergoing environmental reconversion. The farmers have committed not to deforest, to generate new pasture areas and to manage their water supplies carefully. The initial results appear promising and, according to our Agricultural Services department:

- milk production per cow has increased from 4.8 litres to 6.2 litres per day, and from 1.8 to 7 litres per hectare;
- the average number of cows per hectare has increased from 0.6 to 1.0;
- in 10 pilot farms, the average milk production per farm has increased from 180 litres per day 249 litres per day, an increase of 38%;
- the farms have added an average of two new employees;
- average monthly farm profits have risen by USD 913 (38%).

We plan to expand the project to 130 farms over the next two to three years and ultimately, to work with more than 1300 farms to implement the system across southern Colombia. Over the next 10 years, the project aims to increase milk production by 242% and jobs by 50% in the Caquetá region.

"For a long time, breeders in Caquetá have mishandled this ecosystem, and the consequences are reflected in degraded pastures, critical living conditions for livestock, sudden temperature changes, soil erosion and water scarcity. All of these are not viable for the cattle business. The Silvopasture project gives us the possibility to restore the environment. It is very important to seize this opportunity to preserve vegetation."

José María Morales, dairy farmer, Caquetá, Colombia

Case study

Dairy development – Inner Mongolia

Nestlé buys fresh milk from some 25 000 Chinese dairy farmers and provides them with an overall income of around CHF 500 000 per day. These farmers serve three Nestlé factories in the country.

DAIRY DEVELOPMENT: Nestlé's investments in China over the last two decades include a state-of-the-art milk processing plant in Inner Mongolia.

Our milk factory in Hulunbeir, inaugurated in July 2007, is situated in an area of high-quality natural grasslands, on which 5600 farmers graze their cows. The factory provides a reliable market for locally produced fresh milk, which is used to meet the rising local demand for milk powder and other dry, condensed and evaporated dairy products.

Nestlé also provides 54 collection centres in the milk district, 12 of which have chilling facilities, and aims to transfer milk from each chilling centre to the factory within two hours. Technical assistance is also offered to help the farmers to increase the quality, quantity and efficiency of their production.

Case study

East African Dairy Project – Kenya and Uganda

Nestlé has engaged in a partnership with the East African Dairy Development Board (EADD) for two years to help them to secure increased and sustainable milk production in Kenya and Uganda.

FOOD SAFETY: Dairy farmers in Kenya receive technical advice through Nestlé's partnership with the East African Dairy Development Board.

Nestlé advises dairy farmers on feeding, breeding and milking practices. Food safety management is at the core of the training programme, across the value chain from farm to processor. Nestle both provides technical assistance and audits the two factories involved – KCC and Sameer Agriculture and Livestock Ltd – on quality control and food safety management issues to ensure the safety and quality of products according to Nestlé standards.

Implementation of improved agricultural practices will increase farmers' yields, in line with the United Nations Millennium Development Goal to eradicate hunger and poverty. This should benefit some 155 000 families in Kenya and Uganda. As a result of these revised agricultural practices, the real income of dairy farmers is expected to double over a period of 10 years.

The EADD identifies farmers and issues at farm level and will produce a survey of the current liquid milk handling practices in place. While the EADD provides financial assistance, Nestlé implements the project through the provision of technical assistance.

Related CSV films and case studies:

Women's Dairy Development Programme

Lady Livestock Workers, Pakistan

CSV in the dairy sector, Pakistan

Nestlé's initiated milk collection district, Sri Lanka

Agri-bee Maluti window initiative

Related news and features:

Nestlé invests CHF 150 million in the Equatorial African Region

Coffee

Our approach

The coffee supply chain is extremely complex, and 80% of the farmers are smallholders. Around 25 million smallholders depend directly on coffee farming for their livelihoods, and a further 100 million people are involved in the industry as a whole. Nestlé is the world's largest purchaser of coffee.

Through our direct buying system, our long-term commitment allows tens of thousands of farmers and small-scale intermediaries to deliver coffee directly to our buying stations. They also secure a higher price and gain access to free technical assistance. This is a "win–win–win" partnership, as it:

- helps farmers to increase yields and to diversify their activities, giving them higher incomes and improving their living standards;
- provides Nestlé with a reliable supply of high-quality raw materials;
- brings sustained growth for the local economy.

It also helps to train the next generation of coffee growers, and ensures that coffee remains a commercially attractive crop to grow.

In 2010, Nestlé purchased 82 000 tonnes of green coffee directly from farmers and intermediaries in Vietnam, Thailand, China, Indonesia, the Philippines, Côte d'Ivoire and Mexico. Around 10% of the coffee beans used in *Nescafé* are acquired through direct procurement, but through our new *Nescafé* Plan, we will double this by 2015 to approximately 180 000 tonnes a year.

The launch of the *Nescafé* Plan gives a clear commitment towards a holistic approach to coffee farming, manufacturing and marketing. By increasing our direct procurement (renamed "Farmers Connect") operations with small-scale farmers worldwide, we will enable them to increase production, quality and processing techniques and generate higher incomes; it will also ensure Nestlé continues to receive a supply of high-quality products.

The *Nescafé* Plan

On 27 August 2010, we launched the *Nescafé* Plan in Mexico City. The Plan brings together all our Creating Shared Value coffee farming and production practices throughout the value chain, under one "umbrella" which includes external partnerships. This global initiative will help us to optimise our coffee supply chain and reach significant targets on coffee farming, production and consumption. Our strategy is also being communicated in a more consolidated way to consumers through the *Nescafé* Plan website.

In addition to the CHF 200 million we have invested in coffee projects over the past 15 years or so, we will make a further CHF 500 million of investment and premium payments by 2020. Around CHF 350 million will support the *Nescafé* Plan and CHF 150 million will go towards the *Nespresso* Ecolaboration™ platform.

Through this investment, we will double the amount of *Nescafé* coffee bought directly from farmers and their associations over the next five years, so that by 2015, we will be purchasing 180 000 tonnes of coffee from around 170 000 farmers every year. With the support of the Rainforest Alliance, an international

non-governmental organisation, and the Common Code for the Coffee Community (4C) Association, all our farmers' green coffee for *Nescafé* will meet the internationally recognised 4C code of conduct by 2015 (see Sustainable coffee platforms below). In addition, 90 000 tonnes of *Nescafé* coffee will be sourced according to Rainforest Alliance and Sustainable Agriculture Network (SAN) principles by 2020.

Through partnerships with public and private institutions in a number of countries, including Mexico, Thailand, the Philippines and Indonesia, we have already distributed over 16 million high-yield, disease-resistant coffee plantlets to farmers over the past 10 years. These help farmers to rejuvenate their plantations, increase their production levels and improve their income. Under the *Nescafé* Plan, Nestlé will considerably increase this, so that by 2020, we will have distributed 220 million coffee plantlets to farmers.

Nestlé is also expanding its technical assistance programmes, in which Nestlé agronomists provide advice on farming and post-harvest practices to over 10 000 coffee farmers a year.

The *Nescafé* Plan comes in addition to The Cocoa Plan, a CHF 110 million investment launched in October 2009 to improve the quality of cocoa. See Farmer programmes: cocoa for more information.

CHALLENGE: Sustainability and productivity

One of the biggest challenges we face with regard to coffee will be to ensure the 180 000 tonnes of coffee we will have sourced through direct procurement by 2015 is 100% compliant with 4C standards. This is a significant challenge when considering the sheer numbers of farmers involved.

Further to meeting sustainability standards, it will also be key for Nestlé to make coffee growing an attractive proposition for future generations. Ageing coffee trees in many producing countries will have a negative impact on productivity, so we need to encourage the renovation of coffee plantations and provide adequate access to microfinance to ensure the coffee farmers of tomorrow are adequately motivated and supported.

The *Nescafé* Plan – at a glance

By 2015, we will have:

- doubled the amount of directly procured *Nescafé* coffee;
- ensured all "Farmers Connect" coffee meets the 4C code of conduct.

By 2020, we will have:

- invested CHF 500 million in coffee projects: CHF 350 million in support of the *Nescafé* Plan and CHF 150 million for *Nespresso*;
- procured 90 000 tonnes of *Nescafé* coffee grown according to Rainforest Alliance and Sustainable Agriculture Network (SAN) principles;
- distributed 220 million high-yield, disease-resistant coffee plantlets to farmers.

"The Nescafé Plan is about looking ahead to the future of coffee farming. We see this collaboration as an exciting opportunity to bring sustainability tools to thousands of farmers, including many who have not had the benefit of training and technical assistance."

Tensie Whelan,
President, Rainforest Alliance

Sustainable coffee platforms

Through the Coffee Working Group of the Sustainable Agriculture Initiative of the Food Industry (SAI-Platform), Nestlé has been involved in three sustainable coffee pilot projects with local NGOs, all of which have now been completed:

- **ECOM in Central America:** Nestlé and the International Finance Corporation each committed USD 750 000 over three years to strengthen the sustainable coffee supply chain in Central America. Growers received technical assistance to meet the *Nespresso* AAA Sustainable Quality™ Program, Fairtrade and 4C standards, and Nestlé UK purchased the coffee for use in Partners' Blend. This project ended in April 2010.
- **Volcafé in Guatemala:** Nestlé invested USD 290 000 in a project that provided safe drinking water, two classrooms, stoves with chimneys (to reduce wood consumption) and technical assistance with soil erosion and farming practices. This project ended in September 2008.
- **NKG in Vietnam:** Nestlé helped to improve sustainable coffee production in Vietnam, with a focus on using less water for irrigation, reducing the use of fertilizers, improving coffee quality and measuring production costs more accurately. This project ran until December 2009.

As a founding member of the 4C Association, Nestlé also follows a voluntary code of conduct to improve efficiency, profitability, transparency and sustainability in the production, processing and trading of coffee through training and verification. We are also involved with other sustainable coffee verification and certification schemes such as Fairtrade, UTZ Certified, organic and Rainforest Alliance.

Nespresso

Our experts estimate that only the top 1–2% of the world's green coffee crop meets the specific taste and aroma profiles and the demanding quality standards of *Nespresso*. Over the last seven years, we have worked with the Rainforest Alliance to develop the *Nespresso* AAA Sustainable Quality™ Program of integrated coffee farm management practices, ensuring compliance with quality and sustainability requirements.

The programme encourages farmers to adopt best practice in sustainability, requiring certification to the Sustainable Agriculture Network (Rainforest Alliance) standard, and *Nespresso* pays the farmers who supply the highest-quality beans a premium. In 2010, *Nespresso* sourced 60% of its green coffee from its AAA Sustainable Quality™ Program, and as part of its Ecolaboration™ platform for sustainable innovation, launched in June 2009, the Company has committed to increase this to 80% by 2013.

Nespresso's experience over the last seven years has helped increase understanding of the critical importance of coffee farming in contributing to rural development and environmental conservation while also ensuring a long-term supply of high-quality coffee for our *Nespresso* Club Members.

At the outset, the focus was on integrating the *Nespresso* quality requirements and sustainability standards. Based on our field experience in recent years, we have learned that productivity is an essential ingredient for economically viable and sustainable coffee farming. Our strategic collaboration with the leading Central American business school INCAE has enabled us to assess profits for coffee farms in five countries across Central and South America. This has provided us with a reliable baseline for Real Farmer Income™ (RFI), a new metric to demonstrate the impact of efficient coffee farming on the bottom line. Our belief is that significant increments of RFI on an individual farm basis, aggregated at a local or regional level, will provide the economic foundation for successful community development. Productive and efficient coffee farms producing the highest-quality sustainable coffee will be more profitable and will lead directly to improvement in rural development.

The other significant learning from the last seven years is related to the environmental sustainability of coffee farming. By integrating our quality principle into the Sustainable Agriculture Network (SAN) standards of the Rainforest Alliance, we have learned the importance of sustainable coffee agriculture on the responsible use of water resources. In fact, the SAN standard has 21 specific indicators related to water use and conservation.

Case study

Water treatment for coffee farmers supplying *Nespresso* – Colombia

WATER TREATMENT: Diego Jaramillo Diez, a *Nespresso* coffee farmer, at a wet mill in Jardin, Colombia.

As the vast majority of AAA farmers are smallholders, especially in Colombia, they often lack the resources to invest in appropriate water treatment facilities. The outcome of our Tool for the Assessment of Sustainable Quality (TASQ™) indicates that many of these smallholder farms do not have the appropriate equipment for either domestic wastewater treatment or coffee-processing water treatment. The cost of providing such facilities on a farm-by-farm basis for the tens of thousands of farms we buy from is prohibitive, so we have been working with local partners to find more efficient and creative solutions that can protect water, improve crop quality and drive profitability for coffee farmers.

The installation of the micro-central mill in Jardín Antioquia is one such solution. Inaugurated in December 2010 as a joint undertaking between *Nespresso*, USAID, ACDI/VOCA, Cafexport and the local cooperatives, this new mill will provide coffee-milling services initially for 110 coffee farmer families in the region, avoiding the need to replicate equipment in each farm and improving coffee quality. The mill will save an average of 27 000 litres of water per farm and increase farmer profitability by 30%.

Case study

Sustainable Agriculture Coffee Initiative – Mexico

Nestlé Mexico provides technical assistance and training to around 1750 coffee suppliers in the Mexican states of Chiapas, Oaxaca, Puebla and Veracruz, who between them have approximately 3 million coffee plants. The training covers such issues as quality control, less energy intensive coffee drying techniques, marketing and the installation of greenhouses.

SUSTAINABLE AGRICULTURE: In Puebla, Mexico, coffee seedlings provided through The *Nescafé* Plan are loaded onto a truck, ready to be planted.

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.

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 Mexico's "Ecological Milling" Initiative works with government, coffee exporters, mills, local farmers and coffee equipment companies to reduce water use. The initiative has also been promoted by the Mexican government to others in the Mexican coffee milling industry.

Our programme of assistance also includes:

- support for the Micro-Region Supporting Programme, a government initiative that helps the poorest 250 municipalities in the country, by focusing our training programme on 1500 coffee growers from 60 communities in Tezonapa, one of the country's poorest locations;
- establishing the Centro Comunitario Nestlé, in alliance with the Fondo para Niños de México, to offer complimentary education, health and dentistry services to more than 1000 children of local farmers.

Case study

Somatic embryogenesis training – Tanzania and Uganda

Somatic embryogenesis (SE) is a highly efficient propagation technique used to produce more plantlets at a faster rate. It is not a genetic modification but an efficient substitute for traditional propagation methods such as taking cuttings, which are time consuming and offer limited production capacity.

EFFICIENT PROPAGATION: Somatic embryogenesis, a new, faster propagation technique, is being adopted by researchers in Tanzania and Uganda.

The technique, developed at the Nestlé Research and Development Research Center in Tours, France, is being adopted by the Tanzanian Coffee Research Institute (TaCri) and the Uganda Coffee Development Authority (UCDA).

A scientist from each organisation undergoes a year's training in France and will then apply these techniques on returning to Tanzania and Uganda, to improve the propagation rate and quality of Arabica and Robusta coffee varieties. This strategy could lead to the production of hundreds of thousands – even millions – of coffee plantlets that are also resistant to disease and have a good taste profile. Ultimately, other coffee farmers are expected to benefit from this training programme.

Nestlé's Equatorial African Region (EAR) will agree with TaCri and UCDA on how best to roll out the training to national laboratories and institutes within a specific timeframe, and will closely monitor this plan.

Case study

Sustainable Coffee Farming Training Programme – The Philippines

TRAINING PROGRAMME: A classroom at the Nestlé Experimental and Demonstration Farm in Tagum, The Philippines.

Since the 1960s, Nestlé Philippines has sought to increase the income of local coffee farmers by improving their coffee-growing methods. In 1994, we established the Nestlé Experimental and Demonstration Farm in Tagum, where 6000 coffee farmers have been trained on the most efficient ways of growing coffee, and we are also an active member of the National Coffee Development Board (NCDB), which works to promote coffee consumption. Through regular visits to farmers, we reinforce the importance of good plantation management, such as weeding, fertilising, composting and pruning, as well as efficient harvesting and processing methods. Our sustainable farming system also encourages farmers to plant other crops between rows of coffee trees, to provide them with regular additional or alternative income. We directly purchase locally produced coffee, based on market price and quality, at our buying stations around the country. The system allows small coffee growers to sell their beans – even as little as one kilogramme at a time.

"We harvest our green coffee beans in December and given that we are in the mountainous area, it's hard for us to dry the beans properly. With the help of Nestlé's agronomists, we will soon install the drying equipment we need to meet the moisture requirements set during coffee buying."

Gina Mangalindan, coffee farmer, Orani, The Philippines

Case study

Experimental Coffee Farm Project – Thailand

In 1989, coffee was introduced as an alternate crop for hilltribe farmers in northern Thailand as part of a project to restore the ecological balance of the region. A Nestlé Experimental Coffee Development Farm was established in Doi Tung, with two NGO partners: the Doi Tung Development Project and Mae Fah Luang Foundation. Around 22 000 seedlings of 57 Arabica coffee varieties were planted to determine those most suitable for cultivation, and two were identified. Since the project began, more than 1.5 million improved Arabica seedlings have been provided to hilltribe farmers.

COFFEE CULTIVATION: Mheuyhi Abegoo has looked after the coffee plantation and garden at Nestlé's Experimental and Demonstration Farm in Doi Tung, Thailand, since it was created.

"Before the Doi Tung Development project, I planted rice and opium poppies. They were difficult to handle and needed lots of fertilizer, yet yields were low and income was not good. After I started working with Nestlé, 17 years ago, we turned to planting coffee instead because it yields a good price, and only needs fertilizer three times a year. Our family now makes a much better living than before."

Yue-Yee Abegu, worker, Doi Tung Experimental & Demonstration Farm

In addition to the technical support provided by Nestlé agronomists, we support a lunch programme for disadvantaged students at the local school and visit the school to teach students how to grow plants, especially coffee. The children of the farmers can then help their parents with the knowledge they have acquired.

Nestlé purchases coffee directly from more than 700 farmers at its six coffee-buying centres in the main coffee-growing areas of Thailand. Here, local coffee growers can not only sell their crops but also gain access to financial assistance and technical advice.

Nestlé Thailand is also committed to the sustainable use of water resources. Water used at the end of the production process is now stored and reused for the irrigation of coffee fields, reducing water use by 80%.

Case study

CSV initiatives in China

Even before the opening of the *Nescafé* factory in Dongguan in 1992, Nestlé China had established an Agriculture Technical Assistance Service in Yunnan Province to encourage and support coffee cultivation, and created an Experiment and Demonstration (E&D) Farm in Jinghong. Almost 20 years on, Yunnan – traditionally a tea-growing area – has become a quality Arabica coffee-growing region.

BEST PRACTICE: At the Nestlé Experimental and Demonstration Farm near Jinghong, Yunnan Province, China, the coffee cherries are picked.

Nestlé purchases directly from local farmers, 80% of whom are smallholders. Nestlé also supplies plantlets suited to local soil conditions and climate, and advises farmers on techniques to improve both quality and yield. Nestlé's coffee procurement supports up to 19 000 people, and since 1995, nearly 4100 farmers have received training on planting, quality control and processing techniques.

Traditional coffee-processing methods require a lot of water – approximately 150 litres per kilogramme of green coffee. New equipment introduced in 2003 at the Nestlé E&D Farm has decreased water consumption by more than 80% and also serves to demonstrate best practice to other coffee farmers in the region.

Related CSV films and case studies:

Nespresso AAA Sustainable Quality™ Program, Guatemala

Coffee growing: sustainable farming, Vietnam

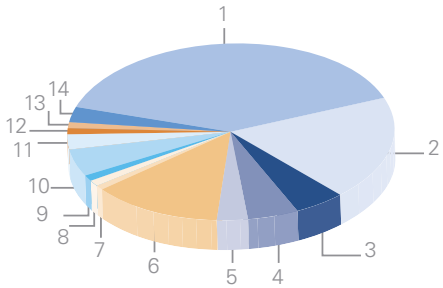
Cocoa

Cocoa is the most important ingredient of chocolate, providing colour, flavour and aroma. Suited to warm equatorial climates, cocoa is mainly grown in small, family-run farms in remote, rural locations and provides an income to more than 4.5 million farmers, many of them in Central and West Africa.

Nestlé bought 380 000 tonnes of cocoa last year – over 10% of the world's supply. Of the global total, West Africa contributes almost 70%.

World cocoa production

1 Côte d'Ivoire (39%)
2 Ghana (19%)
3 Nigeria (5%)
4 Cameroon (5%)
5 Other Africa (3%)
6 Indonesia (13%)
7 Papua New Guinea (1%)
8 Malaysia (1%)
9 Other Asia (1%)
10 Brazil (5%)
11 Ecuador (3%)
12 Dominican Republic (1%)
13 Colombia (1%)
14 Other Americas (3%)



Total volume 3 600 000 tonnes

The Cocoa Plan – at a glance

Under the Plan, we will:

- invest CHF 110 million in cocoa plant science and sustainability initiatives over the next decade;
- distribute 1 million high-yielding, disease-resistant cocoa plantlets each year from 2012;
- train 30 000 cocoa farmers on farming and post-harvest practices;
- support other social projects in cocoa-growing areas.

Our approach

As a major buyer of cocoa and cocoa products, we believe we play a key role in improving the cocoa industry and building a better future for cocoa-farming communities. The overall wellbeing of the cocoa farmers who supply us, and the rural communities they live in, is intrinsic to our ability to continue to do business in the future, make better quality chocolate and satisfy consumer preference. We therefore strive to help to improve and stabilise the cocoa industry and reduce poverty in cocoa farming regions by ensuring we have reliable access to the high-quality, responsibly produced materials required for the continued success of our chocolate businesses.

Yet years of low prices, poor agricultural practices and cocoa disease have caused worldwide cocoa production to stagnate. As a response to this and other key issues facing cocoa farmers, their families and communities – such as low yields, cocoa diseases, poor labour conditions, a lack of education, ageing cocoa trees and the attraction of growing other crops – Nestlé has undertaken a range of initiatives to improve farm profitability, cocoa quality and traceability in the cocoa supply chain. In 2009, we brought them together under one programme: The Cocoa Plan.

The Cocoa Plan

In committing CHF 110 million over the next decade to The Cocoa Plan, Nestlé's investment will focus on plant science and sustainable production in Côte d'Ivoire and Ecuador (the world's largest sources of cocoa and fine cocoa respectively). This investment builds on the CHF 56 million already invested in the past 15 years.

Achieving our vision – to help cocoa farmers to run profitable farms, respect the environment, have a good quality of life and give their children a better education – requires us to focus simultaneously on four key areas:

- **training farmers** on agricultural best practice to increase their yields, reduce cocoa disease, adopt better agricultural farming practices and produce a better quality crop;
- **investing in plant** *research* to propagate disease-resistant plantlets to improve the quality, quantity and sustainability of cocoa production;
- **improving the supply chain** by buying from cooperatives and paying a premium for high-quality cocoa;
- **creating better social conditions** in cocoa-growing areas by working with partners to combat child labour, improve education opportunities, and to improve water and sanitary conditions.

While The Cocoa Plan initially covers just 1.5% of our cocoa supply, we will use our learning from the first year to roll it out to have a more substantial impact.

Farmer training

Training helps farmers to improve their incomes by teaching them good agricultural practices. Training is delivered through farmer field schools and group sessions. Approximately 2400 farmers in Ecuador and Côte d'Ivoire were trained by Nestlé in 2009/10 to help them to increase yields, reduce disease, respect the environment and produce a better quality crop to attract a higher price.

At a typical farm field school, 20–30 farmers meet every few weeks to discuss good agricultural practices, pest management and plantation renewal. For example, 12 field schools set up by Nestlé and supply chain partner Cargill near Gagnoa in Côte d'Ivoire have trained 655 farmers through 73 sessions on cocoa harvesting, drying, safe pesticide use and farming techniques to control common cocoa diseases. A further 291 apprentice farmers have been trained through 17 sessions.

Plant expertise

Investment in plant research will have the biggest direct impact on the ability of cocoa farmers to grow more, higher-quality crops over the long term, and thus sustain a higher income.

Over the past 15 years, Nestlé has provided more than 17 million coffee plantlets to producer countries, and over the next decade, we will provide 230 million more, including 10 million cocoa plantlets. Our R&D Centres in Abidjan, Côte d'Ivoire and Tours, France, work with other research institutes around the world to propagate higher-yielding, disease-tolerant cocoa plantlets. Around 225 000 plants were produced in 2010 in Ecuador and Côte d'Ivoire, but we aim to produce 600 000 plants in 2011, and by 2012, this will have increased to 1 million a year (see case study). The trees can produce typically 50%–200% more cocoa (up to 1500 kg of cocoa beans per hectare).

In Ecuador, we are propagating fine cocoa Arriba varieties for use in our premium chocolate brands.

The supply chain

By working closely with farmer cooperatives, we aim to reduce the complexity of the supply chain, eliminate the need for middlemen, increase farmers' incomes and improve the quality of cocoa for Nestlé.

Working with our supply chain partner Olam, we have built three solar cocoa driers for two cooperatives in Côte d'Ivoire. These use locally available materials – wood, bamboo and polythene – and use the sun to dry the cocoa while protecting it from rain. This speeds up the drying process and improves the quality of the cocoa from the cooperative, helping the farmers earn a higher price.

Social conditions

Cocoa farming is the major industry, source of income and focus of activity for millions of people, yet many cocoa communities do not have clean water or access to education. As a result, living conditions in rural cocoa-farming communities are often poor.

Through The Cocoa Plan, we will continue to work with a number of partners to improve access to healthcare, education, water and sanitation. Our partnerships include:

- being a founding participant in the International Cocoa Initiative (ICI), set up specifically to end child labour practices, through which we ensure that children in cocoa-growing communities are not exploited and have access to education;
- working with the International Federation of Red Cross and Red Crescent Societies (IFRC), in support of its Global Water and Sanitation Initiative, to fund clean water and sanitation in schools in cocoa-growing areas of Côte d'Ivoire (see next page);
- improving the sustainability of cocoa farming with the Centre National Ivoirien de Recherche Agronomique (CNRA);
- co-founding the UTZ CERTIFIED Cocoa Programme;
- supporting the Sustainable Tree Crops Programme, which trained farmers across West Africa and educated them about HIV/AIDS and malaria prevention.

Case study

International Federation of Red Cross and Red Crescent Societies

ON TAP: Our partnership with the International Federation of Red Cross and Red Crescent Societies improves hygiene sanitation and access to fresh water.

As part of its overall partnership with the International Federation of Red Cross and Red Crescent Societies (IFRC), Nestlé has been working with the IFRC and the Red Cross Society of Côte d'Ivoire since 2007, beginning with a project to construct and rehabilitate water and sanitation facilities (50 water points and eight hygiene blocks) for 50 000 people. A second project in 2009–10, with some 10 000 beneficiaries, focused on access to clean water and sanitation in the schools of 10 cocoa-growing villages, as well as participatory hygiene training (PHAST) for children and teachers, the establishment of school hygiene clubs and the training of 50 masons to build family latrines.

In November 2010, Nestlé and the IFRC signed a new global three-year partnership agreement to contribute CHF 2.25 million to water and sanitation, food security and emergency relief initiatives, and to explore cooperation between Nestlé markets and Red Cross and Red Crescent Societies. Nestlé will also sponsor the production of the IFRC's flagship publication, the annual World Disasters Report (WDR).

CHF 1.5 million of the partnership's funds will be dedicated to further developing the school water, sanitation and hygiene work in Côte d'Ivoire over the next three years, expanding it to 55 schools, with 65 water points and sanitation facilities for 53 000 beneficiaries.

Cocoa Plan impacts – Côte d'Ivoire and Ecuador

	Farmer training	Plant expertise	Supply chain	Social conditions
	Training in good agricultural practices	Propagation of cocoa trees	Transparent and reliable supply of cocoa	Focus on schools and water using NGO partners
Oct 2009 – Sept 2010	2 400 farmers trained	210 000 plants produced	6 400 tonnes cocoa bought from 9 056 farmers in 20 cooperatives	IFRC water project in 12 villages
Oct 2010 – Sept 2011	5 000 farmers to be trained	600 000 plants (**target**)	12,000 tonnes cocoa (**target**) from 15 000 farmers in 34 cooperatives	IFRC project extended (see case study above) ICI project in 20 communities

CHALLENGE: Delivering The Cocoa Plan

The challenges in delivering the commitments of The Cocoa Plan include the fact that some cooperatives are achieving the contracted volume of cocoa, some are poorly managed and some are not repaying loans as agreed. We also face the added problem of farmers selling to middlemen rather than cooperatives, and on a wider scale, we are operating in an uncertain political environment as Cote d'Ivoire election results were disputed.

Many millions of children work in agriculture around the world, and those working on cocoa farms can be especially at risk because most cocoa is grown on smallholder farms that are both more vulnerable to volatile crop prices and more difficult to monitor. As a founding participant in the International Cocoa Initiative (ICI), we participate in multi-stakeholder initiatives that seek to tackle child labour and its root causes; one such project with the ICI will support 20 communities in Côte d'Ivoire that supply cocoa for our Fairtrade-certified *KitKat*. We also require all of our suppliers to abide by our Supplier Code, which includes provisions on forced labour and child labour.

Case study

The role of research and development – Côte d'Ivoire

About 800 000 Ivorian farmers produce 1.3 million tonnes of cocoa a year, but after decades of increasing production, the quantity and quality of the country's yields are falling. Cocoa trees are getting old and sick, and the country's harvest has stagnated over the last five years, causing successive years of global cocoa deficits and high volatility for cocoa prices.

COCOA NURSERIES: A farmer in Côte d'Ivoire tends to cocoa plants that were developed using somatic embryogenesis at Nestlé's R&D Centre in Abidjan.

Nestlé therefore agreed with the Ivorian Government, via the National Agronomical Research Institute (CNRA), to contribute to the renewal of old cocoa plantations in the country through our state-of-the-art Research & Development Centre in Abidjan – a centre of excellence for plant propagation and a focus for our work with farmer cooperatives. Under The Cocoa Plan, 600 000 high-yield plants will have been distributed in the two years to June 2011 and a new propagation laboratory is due to be inaugurated in June 2011, as we aim to distribute 10 million high-yield, disease-resistant plantlets in 10 years.

As part of the first large-scale cocoa plant propagation in Côte d'Ivoire, a laboratory to produce plants via somatic embryogenesis (SE) is being built. In 2009, Nestlé started to produce cocoa plants using a high-yielding variety of cocoa, in seven nurseries established up-country with six cooperatives. By July 2010, 135 000 cocoa plants from these nurseries had been distributed to 282 farmers, and 22 nurseries had been established with 21 cooperatives to produce 600 000 cocoa plants, which will be distributed in June 2011 to about 1245 farmers. One million plants will be distributed in 2012.

The main impact of the R&D centre will be a qualitative improvement in the quality of local cocoa and an increase in production. The cocoa will be harvested, fermented, dried and stored as per recommended best practice, and will secure premium prices for the suppliers.

The 10 million trees will help to reduce deforestation by replacing 10 000 hectares of old cocoa trees over a decade, each of which will yield three times more cocoa beans. The potential of the propagated varieties is between 1.5 and 2.5 tonnes per hectare, and annual farmers' income has the potential to rise from USD 480 per hectare to USD 1800.

Taken together, the potential yield, the technical training of more than 30 000 cocoa farmers, the premiums paid for good quality and the social projects funded via The Cocoa Plan will improve the social environment of farmers and increase the supply of better quality beans to Nestlé's factories.

"Linking farmers to markets and strengthening their value addition to generate regular farm income is key for rural development."

Hans Jöhr,
Corporate Head of Agriculture

Case study

Health and nutrition programmes – Ecuador

The Union of Farmers' Organisation from Quininde County (UOCAQ) is a cocoa farmer organisation located in the province of Esmeraldas, in the north-west of Ecuador. In 2009, UOCAQ began supplying cocoa directly to Nestlé, helping to secure better prices for the farmers by eliminating middlemen from the traditional supply chain, and guaranteeing Nestlé a supply of higher-quality, traceable cocoa.

HIGH POTENTIAL: At Nestlé's Experimental Farm in Ecuador, agronomists Eduardo Eusebio Pérez Chuez and Luisa Marillac Trujillo examine cocoa plants developed at our R&D centre in Tours, France.

In addition, Nestlé Ecuador organised a day when UOCAQ members and their families could receive health check-ups and nutritional advice. During the day, around 70 families from the local cocoa-farming community attended the *Nutrimovil* stand, took advantage of the free health checks and were given dietary advice for both adults and children.

The main objective of the programme is to make rural cocoa communities more aware of potential health risks and provide guidance on how to eat in a balanced way, reducing the negative impact of poor nutrition on the lives of the farmers and their families.

Nestlé Ecuador continues to organise similar events in other cocoa-growing communities.

Related website links:

The Cocoa Plan

ICI

WCF

Sustainable Tree Crops Program

UTZ Certified

European Chocolate and Cocoa Industry

Related CSV films and case studies:

Sustainable Cocoa: Côte d'Ivoire

Nestlé's Cocoa Plan in action, Côte d'Ivoire

Sustainable fine cocoa growing, Ecuador

Other commodities

More than half of Nestlé's expenditure on raw materials goes towards the procurement of commodities other than milk, coffee and cocoa. This includes the purchase of fruit, vegetables, grains and cereals, sugar, edible oils, meat and spices. Some of these commodities come directly from farmers, while others are sourced through local and international purchasing options.

Deforestation

Nestlé views the destruction of tropical rainforests and peatlands as one of the most serious environmental issues facing us today. It is estimated that rainforest destruction contributes to around 20% of greenhouse gas emissions and the growing use of biofuels is a significant factor in this destruction.

At our Annual General Meeting in April 2010, Nestlé Chairman Peter Brabeck-Letmathe reinforced this position by committing to ensuring that our products do not have a deforestation footprint. Then in May, José Lopez, Nestlé's Executive Vice President of Operations, announced a partnership with The Forest Trust (TFT) to eliminate deforestation from our supply chain. Nestlé is the first consumer goods company to become a TFT member.

Together with TFT, we have defined Responsible Sourcing Guidelines to guide our procurement process, to ensure compliance with the Nestlé Supplier Code, and to provide technical support to those who currently do not meet the requirements but who are committed to achieving them. Our action plan for achieving these ambitious goals saw supplier assessments begin in July 2010 in South East Asia.

In addition to the protection of forest areas of high conservation value, the Guidelines give specific attention to peatlands and forest areas of high carbon value. We also seek to foster relationships with indigenous local communities to ensure their rights are protected in the face of plantation expansion.

The Responsible Sourcing Guidelines are enforced with immediate effect.

Palm oil

Nestlé uses approximately 320 000 metric tonnes (0.7% of the world's global production) of processed palm oil. While our efforts, together with TFT, are delivering preliminary encouraging results, we remain concerned about the serious environmental threat to rainforests and peat fields caused by palm oil plantations, and are conscious of our responsibility to contribute to effective and sustainable solutions.

As an active member of the Roundtable on Sustainable Palm Oil (RSPO) Nestlé has committed to source, by 2015, only palm oil from sources certified as sustainable. Around 20% of total palm oil purchased is currently covered by sustainable palm certificates and certified palm oil, and we are committed to sourcing 50% of total group volume from sustainable sources by the end of 2011. An action plan has been prepared with TFT to help us to achieve these targets.

Any future decision regarding our selection of suppliers and supply strategy will be based on the compliance with the Responsible Sourcing Guidelines and the overall Nestlé Supplier Code.

"For the first time ever, a global company is saying that it doesn't want its products to have a deforestation footprint, and it is taking action to live up to its words. This is the whole push behind our model – to get one end of the supply chain to take responsibility for what happens at the other."

Scott Poynton,
Executive Director, TFT

"Nestlé's policy sends a very clear message to companies that are destroying forests and peatlands for new plantations. If you don't stop deforestation and protect peatlands, your days of supplying to global brands such as Nestlé are over."

Andy Tait,
Senior Campaign Advisor, Greenpeace

CHALLENGE: Biofuels

Palm oil is used for the production of biofuels. However, it is our belief that biofuels should only be accepted when they: do not threaten food security; are able to demonstrably reduce greenhouse gas emissions; do not pose significant land use issues, or significant water allocation and stewardship issues; and when they do not risk conservation conflicts.

Therefore, Nestlé continues to advocate against the use of crops for fuel rather than food, as the growing use of biofuels is a significant factor in the destruction of rainforests.

CHALLENGE: Forest stewardship and other commodities

In reflection of our commitment to ensure our products do not have a deforestation footprint, Nestlé aims, through its supply chains, to ensure that the forest areas within its sphere of influence have been assessed for their ecosystem value and appropriate management responses applied.

An assessment of those raw materials with the highest impact on forests has identified the following categories as priorities for Nestlé: paper and paper packaging, palm oil, soya, meat and dairy products, cocoa and coffee. Priority in implementing this commitment has been given initially to palm oil, paper and paper packaging. Within each product area, supply chains are being assessed to prioritise which geographical regions and suppliers should be engaged first.

Related website links:

The Forest Trust (TFT)

RPSO

Related CSV films and case studies:

Grains and legumes in Central and West Africa

Fighting crop disease in West Africa

Soybean Popularisation Project

Maggi Mousseline, France

Basil and tomatoes, Italy

Case study

Soybean Popularisation Project – Nigeria

In Nigeria, a Sustainable Agriculture Initiative (SAI) collaboration between Nestlé, which recently joined the Soy Round Table, and the University of Agriculture in Abeokuta has been instigated to increase soybean production in the country. Research, funded by the University, has created a selection of high-yield varieties that make soybeans a more attractive crop for local farmers, and by providing a regular and reliable income, they are helping to reduce rural poverty.

CAPACITY BUILDING: In Nigeria, Nestlé's collaboration with the University of Agriculture in Abeokuta has increased soybean production and developed high-yield varieties that make soybeans a more attractive crop for local farmers.

As part of the implementation of the Soybean Popularisation Project, the team regularly visits the participating production sites in the south west of the country, during which they assess the status of the crop and advise on farming practices, harvesting techniques and other handling processes. In addition to such capacity-building efforts and agricultural extension activities, soybean threshing machines have been donated to make the production process more efficient and less tedious.

More than 200 local farmers currently benefit from the project and over 150 tonnes of soybeans have been produced from high-quality seeds. As well as generating employment, the farmers' income has increased by approximately 50% and Nestlé receives a secure supply of high-quality raw materials for its products. The project has also raised awareness among local people of the usefulness and importance of the soybean as a means of poverty alleviation, improved nutrition and even the promotion of literacy among farming households.

As a result of this initiative, the increased interest in soybean production by local farmers has been mirrored by increased engagement among other stakeholders such as the Grain Farmers Union, the Institute for Agriculture Research and Training, and the International Institute of Tropical Agriculture (Nigeria).

Case study

Grains Quality Improvement Project – Central and West Africa

Nestlé's sustainable agriculture strategy is designed to ensure a steady supply of safe, high-quality agricultural commodities and allow rural communities to increase their income as a result. One of our priorities in this area is to reduce the high levels of mycotoxins in cereals, dried fruits and nuts from Central and West Africa, as this natural, fungus-based contamination can cause immune suppression, impaired development in children and liver damage in both humans and animals. Up to 30% of cereal crops are lost to contamination, caused largely by the humid environment and poor drying and storage practices.

HEALTHY START: A farmer in Tamale, Ghana, dries the grain produced with support from the Nestlé Grains Quality Improvement Project.

Locally produced cereal grains and legumes (beans, peas, etc) are important to our business, and particularly for our breakfast cereal brands like *Golden Morn*, *Cerelac* and *Cerevita*. Our Central and West Africa business therefore launched the Grains Quality Improvement Project, in conjunction with the International Institute of Tropical Agriculture (IITA) in Benin, to reduce mycotoxin contamination levels in Côte d'Ivoire, Ghana and Nigeria by 60%.

This reduction will be achieved through a combination of:

- toxin-reduction strategies such as good agricultural and storage practices, developed in co-operation with national extension partners;
- capacity-building training sessions from Nestlé agronomists;
- raising awareness of the health implications of contaminated grains among agricultural extension officials, food companies, retailers, transporters and wholesalers;
- paying price premiums to farmers for mycotoxin-free produce.

In 2008/09, 10 000 trained farmers produced grains with mycotoxin levels within Nestlé standards (four parts per billion) and in 2010, the number rose to 30 000 farmers. The management and control of mycotoxins is supported by an awareness campaign and greater stakeholder dialogue, delivered through leaflets, newsletters and even pictorial guides for illiterate farmers, which are intended to make food companies, retailers and wholesalers, as well as farmers, more aware of the health implications of mycotoxin contamination.

An estimated 150 million people in the three countries exposed to aflatoxin (a type of mycotoxin) will have healthier diets as a result of the project, and as it is planned to be rolled out to Zimbabwe, Kenya and other countries where mycotoxin contamination is an issue, many more could also benefit.

Case study

Contract chilli and red rice farming – Malaysia

CHILLI SOURCE: A proud farmer from Kelantan, Malaysia, whose chillies are used in *Maggi* chilli sauce.

In line with our policy of procuring commodities for our business from local suppliers and creating shared value for both parties, the Agricultural Services Department at Nestlé (Malaysia) Berhad began engaging local farmers in Kelantan to produce chillies as long ago as 1995.

In return for providing the key ingredient for our Maggi chilli sauce, the Contract Chilli Farming Project provides the farmers with a secure market for their produce – via the local Farmers Organisation Board – at a pre-determined price. Approximately 80% of the chillies produced under the scheme are purchased by Nestlé.

The programme shares sustainable agricultural practices with the farmers, and Nestlé staff train them on efficient and environmentally friendly farming systems, including pesticide application technology, waste management and good harvesting techniques, and provides field demonstrations on increasing productivity, reducing costs, minimising environmental impacts and worker safety. The contract also ensures greater product traceability.

On average, the farmers on the scheme now earn MYR 8000 per six-month season – double their previous income – enabling them to educate their children, invest in machinery and purchase more land. Just four farmers produced 16 tonnes of chillies from four acres of land in 1995, but there are now 300 farmers involved in the scheme, producing 800 tonnes on 300 acres of land, and many more have expressed an interest.

Ten years on, the project has also won the Prime Minister's Award for Socio-Economic Development, and the farmers have been granted the SALAM accreditation for excellence in farming practices – a pre-requisite for attaining the Ministry of Agriculture's "Malaysia Best" label. More recently still, the Chilli Puree Project was initiated to stabilise prices, minimise wastage and create new income opportunities in times of over-supply, by processing fresh chillies at a new chilli puree factory.

The successful chilli contract farming scheme has since been replicated in Sarawak with the cultivation of red rice, an ingredient in locally produced *Cerelac* infant cereals. This initiative also gives local farmers the opportunity to be part of Nestlé's supply chain, involving more than 500 farmers and 350 hectares of rural farmland. The project also enables good agricultural and labour practices to be shared, and through Ministry of Science, Technology and Innovation funding, Nestlé has procured agricultural machinery suitable for traditional farmers.

Case study

Chicory production – South Africa

Until 2003, the supply of chicory to our South African business was monopolised by one local supplier. However, price increases led to the import of 80% of our chicory from India at a lower cost. However, as Indian exports to Europe rise, the shifting supply and demand suggest the price of imported chicory will increase too. Therefore, Nestlé South Africa launched a project to improve the production of local chicory.

SUCCESSFUL YIELD: The Nestlé South Africa chicory project began in 2008 with emerging farmers in Weenen, Kwa-Zulu Natal province.

The project focused on Weenen in KwaZulu Natal province, where available land, good soil and existing irrigation provided an opportunity to revitalise the local economy. In line with the Government's Land Redistribution Policy and Broad Based Black Economic Empowerment (BBBEE) programme, the project centred on farms owned by black farmers whose ancestral land had been returned to them. The areas selected were close to our Estcourt factory, which uses chicory in *RICOFFY*, this providing an established market and additional employment opportunities.

The first large-scale trials, in late 2008, focused on finding willing farmers, understanding the nature of local diseases and pests, and recording water absorption, soil type and climate, so that by the first planting season of 2009, 13 farmers had planted 19 hectares. In 2010, around 440 tonnes of raw chicory produced 90 tonnes of roasted chicory at the Estcourt factory. In 2011/12, we expect to produce 505 tonnes of roasted chicory from 70 hectares, rising to 565 tonnes from 120 hectares in 2012/13.

To reach these targets, we need to continue to find solutions to many challenges. Support from the KwaZulu Natal Department of Agriculture has included a ZAR 3 million investment in tractors and other equipment, as well as mentoring from extension workers. Nestlé agronomists are assisting with farmer training and trials in cultivation, irrigation and seed treatment for germination, and a supplier for a registered herbicide to help with weed control has been located.

In June 2010, the farmers, officials and extension officers from the Department of Agriculture, the Deputy Mayor and Nestlé staff – agronomists and factory employees – attended a farmers' day, at which key issues were discussed, cultivation and harvesting demonstrations were given, future plans were agreed and awards presented.

Case study

Sustainable pistachio production – Turkey

GROWTH AREA: A farmer tends to his pistachio trees in Gaziantep, Turkey.

In collaboration with the TEMA Foundation (the Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats), Nestlé has started a TL 1.5 million (CHF 1.1 million) rural development project in south-eastern Turkey. The project is owned by DAMAK, Nestlé Turkey's strong local brand of pistachio milk chocolate, which has a heritage dating back more than 75 years. Through the project, 80% of the farmers in the country are being trained in the sustainable production of high-quality pistachios.

Turkey is the third largest producer of pistachios in the world with 102 000 tonnes a year, contributing 20% of total world production, and there are 10 000 fruit-bearing pistachio trees in the area. However, there is the potential to increase production levels significantly, so to fulfil this potential, pistachio cultivators across the region are being trained in the most efficient agricultural techniques.

Nestlé believes that through such capacity building, productivity per tree, which is currently around 3 kg, could increase three-fold in the next five years. The economic and social welfare of 100 000 people living in the immediate area will also be enhanced, and similar projects with other crops are more likely to follow.

"Our greatest desire is to make Turkey a global brand for pistachios. If we cultivate them with the right modern methods, the economic value of the commodity will increase and the income level of the people in the region will increase in parallel. As a result, the migration from villages to the cities – and its social and economic consequences – will also be avoided."

Professor Orhan Dogan, General Manager, TEMA Foundation

Water and rural development

Water and rural development

Our long-term success depends on the water resources that supply our business operations and support the livelihoods of suppliers and consumers, which is why water is one of the three key focus areas of our Creating Shared Value framework.

Agricultural food production will, according to the FAO, need to increase by 70–80% by 2050 to meet the demands of a growing global population. Food production requires water yet its availability to farmers is increasingly threatened due to overuse today and further by climate change policies (biofuel), population growth and urbanisation in the years to come, so we need to implement good management practices and find new ways to reduce risks. If no new policies are introduced, the OECD projects that almost half the world's population (47%) will be living under severe water stress by 2030.

Many climate change impacts – melting ice, rising sea levels, more frequent and severe droughts and floods – are felt through water and the food industry is more exposed to climate change than most, because its key raw materials are sourced from nature and closely linked with the environment. A lack of water, combined with changing climate patterns, will impact vegetation distribution, abundance and yields, so we need to implement good management practices and find new ways to reduce risks.

Good water quality in the areas surrounding our plants has direct benefits for our business, society and the environment, so we treat all our water in wastewater treatment plants. We prefer to use municipal wastewater plants to ensure we return only cleaned water back into the environment, but where these are insufficient, we invest in our own on-site facilities (approximately 222 to date, including our latest in Tema, Ghana). In many countries, Nestlé was the first company to set up such facilities, which have raised local expectations and standards, led to new policies and stricter regulations over time and given Nestlé a competitive advantage.

Working with farmers to manage water use

Approximately 70% of the world's withdrawn water is used by farmers, who use, on average, 3000 litres of water to produce one kilogramme of raw materials. By comparison, Nestlé's direct impact – about three litres of water per kilogramme of product made in our factories – means that we can have a significantly greater overall impact on water resources by helping farmers to reduce their water consumption.

Good water management is fundamental to the livelihoods of the 556 600 farmers who supply us. We invest in helping them to become better stewards of water, support water resource awareness and education programmes, and participate in global dialogue with leading experts and policymakers.

The key opportunities we have for improving water management among our own farmers include increasing productivity in rain-fed agriculture; more efficient irrigation; and world trade that moves foods whose production requires a lot of water from water-abundant to water-scarce countries.

Piecemeal action and initiatives in isolation will not work. We are a leading member of the World Economic Forum Water Resources Group that, for the first time, looks at global water shortage watershed by watershed, and provides tools for cost-effective solutions in individual river basins. The main tool is the water cost curve, which includes measures on both the demand and supply side of freshwater, prioritising them according to the cost per cubic metre of water saved.

Increasing productivity in rain-fed agriculture

More than 80% of all crop lands are rain-fed so disrupted rainfall due to climate change will affect productivity. With rain-fed agriculture, there are huge opportunities to manage water, soils and crops more efficiently, build resilience to future water-related risks and contribute to increased yields. Where rain-fed farming is possible, Nestlé supports soil and water conservation measures such as using mulches and no-tillage practices to reduce surface evaporation, and vegetative barriers and contouring to retain soil moisture and minimise run-off.

Nestlé has also helped farmers to develop rainwater harvesting channels on roofs at dairy farms in the Dominican Republic, to provide water for cows to drink and to irrigate pasture land, while in Mexico, Nestlé supports the construction of rainwater storage systems and works with farmers to improve their water management.

More efficient irrigation

About 70% of global freshwater withdrawals are used for agriculture, yet inefficient irrigation techniques, combined with water losses through evaporation, overuse of groundwater and pollution all threaten the availability of fresh water and jeopardise food supply and health. Nestlé promotes modern irrigation technologies such as drip irrigation and soil moisture monitoring equipment which allow farmers to apply the exact quantity of water their crops need, increasing yields and minimising nutrient leakages into rivers and aquifers. As irrigation requires capital investment that increases the cost of production, it is most efficient to focus irrigation on the crops with the highest value per irrigated hectare. For farmers already irrigating, increasing the efficiency of water use lowers the unit cost of production. In Dak Lak in Vietnam – the world's largest Robusta coffee producer – a Nestlé project to train farmers on the optimal timing and techniques to irrigate their trees, has decreased the water needed per coffee tree per year from 3.09 m^3 to 1.56 m^3, a saving of 1530 litres per tree per year, without affecting yields. And with 1300 trees per hectare, and about 500 000 hectares planted with coffee, this could save up to 1 billion m^3 of water every year. This study will be extended further to share good irrigation practices in other coffee areas.

In addition:

- Nestlé has helped to install irrigation systems for tomato growing in Panama, replacing the traditional water-intensive, gravity-fed system and saving 2.8 million m^3 of water per crop cycle;
- in Mexico, Nestlé supported a new drip irrigation system that has increased the volume of forage grown per hectare by 60%, resulting in more feed for the cows, profits for reinvestment and higher milk production;
- in Ocotal in Nicaragua, a partnership with IDE and ECOM has installed 160 micro-irrigation systems on local coffee farms to increase yields.

Other water management solutions

Virtual water and water footprinting

From a global perspective, one possible solution to relieve pressure on water resources is for water-scarce countries to import raw materials (or goods) whose production requires a lot of water from water-abundant countries. In this sense, world food trade indirectly moves considerable volumes of "virtual water" already; today, nearly one-quarter of food trade occurs from water-abundant to water-scarce areas. With global water shortages increasing, the International Water Management Institute (IWMI) estimates that this percentage may rise by 38% by the year 2025. For instance, without trade, irrigation water depletion for cereal production would in fact have been 11% higher today, and by 2025, the IWMI projects this percentage will further increase to 19%.

At a farm level, "virtual water" also offers a good opportunity to improve water use and management through an assessment of the total water footprint of a crop. Any given technology or production system has an associated water requirement ("water footprint"), and alternative technologies, such as improved water management, more efficient irrigation or breeding more water-efficient plants, can reduce the water requirements per unit of output of a product.

To provide greater insight in this area, Nestlé has undertaken a number of studies to assess the water intensity (or "water footprint") of different crops and production systems, and research new technologies that require less water per unit of production. These include:

- a pilot scheme, in conjunction with WWF, to assess the water footprint of *Bitesize Shredded Wheat* in the UK (see case study);
- a project with the International Water Management Institute into the water footprint of milk, wheat and rice production in Moga, India (see case study);
- the ongoing SuizAgua project, in conjunction with the Swiss Development Agency and a consortium of Swiss companies, which is designed to reduce company water footprints and provide sanitation and environmental education in Colombia.

Collaborating with other actors in the food industry

We exchange best practice and guidelines for sustainable water use at a farm level with other food companies and stakeholders, and contribute to programmes through collaborative, food industry-led groups such as the Sustainable Agriculture Initiative (SAI) Platform. These encourage efficient water management practices that impact positively on the quality and quantity of the water resources at a watershed level.

Nestlé is also playing a leading role in a new pilot project in India, led by the Water and Agriculture Working Group at SAI. Run by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the project seeks to scale up the use of good water management practices and related tools at a farm level, and will focus on a few key commodities including rice, potatoes, tomatoes and fruit.

Nestlé is also a founding signatory of the UN Global Compact's CEO Water Mandate, and has provided a specific Communication on Progress on water since 2009.

Engaging with our neighbours

In many places around the world, especially in our bottled water business, we engage with local farmers not as suppliers but as neighbours. While they may not supply us with raw materials, they work and live near our operations, so we work together to implement safe land use practices that protect water resources.

Since acquiring the *Henniez* brand in Switzerland, Nestlé Waters' Eco-Broye programme is seeking to extend the water resource preservation area for this brand of mineral water from 100 hectares to 400 hectares via partnerships with local farmers. In addition to reducing the potential long-term threats to water and environmental resources and maintaining farmer income, a new biogas digester is also planned to help to protect groundwater resources while "ecological corridors" are being developed with the farmers and a biologist to preserve and stimulate local biodiversity.

In Vittel in France, Nestlé Waters is equally committed to protecting the water resources needed for bottling the prestigious brand *Vittel* and *Contrex*. Elsewhere, Nestlé Waters in Turkey helped to implement pipelines and storage tanks on Mount Uludag to help local villagers to grow pineapples, strawberries, vegetables and other cash crops, and in Greece, Nestlé Waters is studying land use practices around natural springs. Similar initiatives include the protection of water resources in the vineyards around Mendoza in Argentina.

Community water management

As well as managing water consumption in our operations and supply chain, we increasingly contribute to sustainable community water management schemes. These help to raise awareness and promote an understanding of water and sanitation issues so that the spread of disease is controlled. For instance:

- the water filtration plant at our Kabirwala factory in Pakistan provides clean drinking water to almost 5000 people in the local community;
- a joint collaboration with the Lutheran World Federation (LWF) and Inter-Faith Action for Peace in Africa (IFAPA) has brought water and sanitation facilities to an estimated 22 000 people in eastern Rwanda; Nestlé provides the financial and technical support;
- Nestlé has supported the Global Water and Sanitation Initiative (GWSI) of the International Federation of Red Cross and Red Crescent Societies (IFRC) since 2006, and signed a new global partnership for 2010–2013, where community water and sanitation projects will again be a main focus;
- in Côte d'Ivoire, a project providing 10 000 people with access to clean water and sanitation in the schools of 10 cocoa-growing villages, participatory hygiene training (PHAST) for children and teachers, the establishment of school hygiene clubs and training of 50 masons to build family latrines has just been completed with the IFRC and the Red Cross Society of Côte d'Ivoire, with plans to reach schools in 55 villages and 53 000 beneficiaries in the next three years;
- a similar PHAST project benefitted 40 000 people in Mozambique together with the Mozambique Red Cross.

Related CSV films and case studies:

Partnership with IFRC for water and sanitation

Global partnership for development in Mozambique

Bringing clean water to thousands in Rwanda

Related news and features:

Nestlé Chairman addresses water security at the World Economic Forum

Case study

Water-saving initiatives – India

Moga, in the Indian Punjab, is one of Nestlé's largest milk districts, from which we buy 1.25 million litres of milk a day from 100 000 farmers. However, local water resources are overexploited and the water table is falling by at least one metre a year, which could affect milk supply in the long term.

WATER FOOTPRINTS: Dr. Babarjit Singh Bhullar advises farmers on good water management techniques during a water awareness programme near Nestlé's Moga factory in India.

More water is needed to produce some products than it is to produce others, and it is not only inefficient to try to grow the most water-intensive products in water-scarce areas; it will contribute to an even greater water crisis in the future. Therefore, together with the International Water Management Institute (IWMI), Nestlé undertook a study of the water intensity of milk, wheat and rice production in the region. The study involved three different phases: measuring the water footprint of the entire farm system; assessing the sustainability of the water footprint of the different crops grown in the area; and developing a comprehensive response using best farming practice to make water use more sustainable and ensure the long-term supply of agricultural raw materials.

The analysis of the water footprints for milk and crop production shows that current groundwater use is unsustainable and that water stress is becoming a limiting factor for sustaining agricultural growth. More specifically, the study shows that in this region, it takes 1034 m^3 of irrigation water to produce a tonne of rice, the most widely produced crop, but only 565 m^3 to produce a tonne of milk. Milk is also estimated to provide the highest gross value of production per hectare of land and per cubic metre of water use.

To reduce water use in Moga, IWMI recommends intensifying milk production by increasing the fodder area, the number of lactating cows and increasing each cow's productivity. It also suggests improving the cultivation and irrigation practices of rice – a very water-intensive crop – to reduce its water footprint. To do so, technologies developed in other regions of the world could be adapted for rice and wheat farmers in Moga.

For example:

- delaying the transplanting of paddy fields reduces evaporation losses by 9%, 140 million m^3 of groundwater and 11.2 million kWh of energy to pump the water;
- laser-assisted land levelling can reduce groundwater pumping by one-third and improve rice and wheat yields;
- raising the height of retaining "bunds" by 22 cm helps to capture more than 95% of the monsoon rain that falls on rice fields.

Case study

Agricultural water management – Italy

In Italy, Nestlé is a direct buyer from many Italian agricultural producers, and particularly relies on locally grown vegetables for its *Buitoni* frozen vegetable range *La Valle degli Orti*. We therefore have a direct interest in helping local growers to adopt the best irrigation solutions, so they increase production, continue to supply quality produce to Nestlé and support their local communities.

IRRIGATION PARTNERSHIP: Benjamin Ware, sourcing specialist at Nestlé, looks at a crop of tomatoes in Italy with Alessandro Piva, the agronomic service manager of Consorzio Interregionale Ortofrutticoli (CIO).

To produce *Buitoni* sauces and frozen pizzas, Nestlé uses locally grown tomatoes. The use of drip irrigation and automated watering technology has maximised crop yields and, at the same time, saved irrigation water. We have achieved an improvement in yield, quality and the water used to grow our tomatoes, and the investment paid for itself in less than two years. Farmers also benefit from lower water bills.

Nestlé also cooperates in a project with key Italian stakeholders, such as water utility companies, farmers' associations, local producers, the Agriculture Ministry's Commission and others, to investigate local agricultural water policies. It is evaluating the effects of better water management practices in four areas:

- drip irrigation: saving water, increasing yields and improving the quality of some crops, but this can be expensive;
- automated watering technology: used to cope with dry seasons, but the dominant system in Italy is open channels, not pipes;
- management tools: used to advise farmers on efficient and economical irrigation systems;
- water distribution networks: can save money and water by reducing leakages.

Case study

Eco-Schools – South Africa

The Eco-Schools water management and conservation programme supports schools and local communities across South Africa with food gardens and healthy living activities. With a focus on schools in low-income and rural areas, the project has installed water-saving irrigation schemes and trained schools on rainwater harvesting methods. The initiative, which promotes the efficient use of available resources to ensure food security, water conservation and management, is run in collaboration with the Department of Education, School Governing Bodies (SGBs) and a number of environmental development organisations, including WWF and the Wildlife and Environment Society of Southern Africa (WESSA).

HEALTHY LIVING: The WESSA/ WWF Eco-school programme in Mdantsane, Eastern Cape, funded by Nestlé South Africa, supports schools and communities with gardens and healthy activities based on sustainable practices.

Case study

Project WET – Nestlé Waters

Nestlé Waters supports Project WET (Water Education for Teachers), a global education programme that promotes water awareness among millions of children and their teachers. Using publications, teacher training workshops and local community events, the programme has been extended to China, Lebanon and the UAE, and will expand into Jordan in 2011.

Project WET Lebanon, for instance, is a partnership with the Lebanese Ministry of Education and UNESCO, and plans to target 1450 public schools, while in the UAE, following a successful pilot with 35 teachers from 14 schools, the project will be relaunched across the country by 2012. Teachers and students in 15 schools in Shanghai are also involved in the programme.

NATURAL CLASSROOM: Co-founded and sponsored by Nestlé, Crystal Springs Preserve welcomes students of all ages to learn about the plants and animals that make it their home.

Nutrition and rural development

Given our ambition to be the world's leading Nutrition, Health and Wellness Company, nutrition is of primary importance to our business strategy. There are clear linkages between nutrition and rural development, again underlining the reasons why both are key focus areas of Creating Shared Value.

Rural market activation

To provide low-income consumers with greater access to affordable food products, we offer almost 4860 Popularly Positioned Products (PPPs) that are made available at a reduced cost and appropriate serving size through a range of locally adapted distribution methods.

By directly interacting with rural consumers at a local level, we can support rural development and build relationships between our brand and the communities that lie beyond the main urban areas. Such distribution programmes also enable us to give out product samples, and educate consumers on our products and how to use them.

Micronutrient fortification

With many consumers in developing countries suffering from deficiencies in iron, zinc, iodine and vitamin A, we also fortify our PPPs with key micronutrients, as appropriate. This approach not only improves nutrition but creates employment opportunities for market stallholders, mobile street vendors and door-to-door distributors.

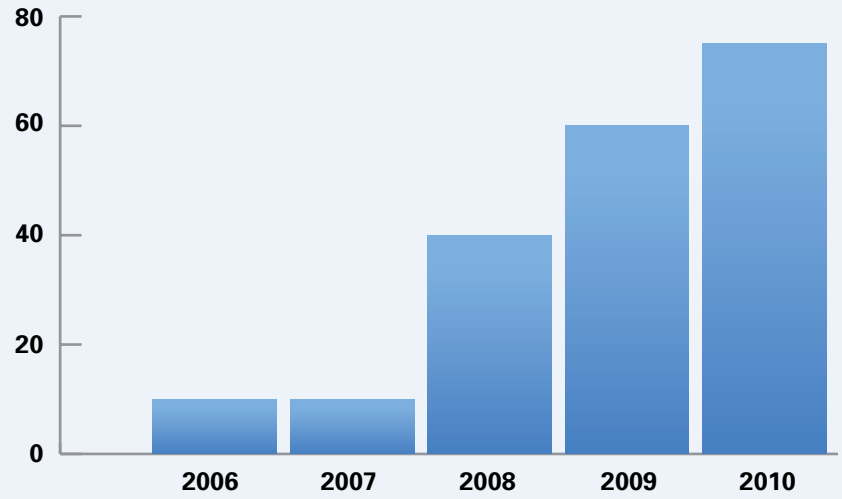
Nestlé sold 600 000 tonnes of iodine – enriched *Maggi* bouillion cubes, seasonings and noodles in 2010. The iodine-fortified *Maggi* cubes are sold one at a time in local shops at a price within reach of the low-income consumer, and 90% of the *Maggi* product range now carries added iodised salt (amounting to 90 billion servings annually).

Another way to reach local populations in emerging countries with affordable, nutritious products is by using fortified milk products. Through Project Rainbow, our affordable milk range – including brands such as *NIDO*, *Bear Brand*, *Klim* and *Ideal* – has grown from 10 countries in 2006 to 75 by the end of 2010, and provided the equivalent of 5 billion glasses of milk.

Micronutrient-fortified Nestlé products (servings per year)*	
Iron	47 billion
Vitamin A	32 billion
Iodine	94 billion
Zinc	14 billion

*across all categories except infant formulas

Fortified affordable milks, number of countries



An average of **75 million *Maggi* cubes and tablets** using iodised salt are sold daily in Central and West Africa.

Healthy Kids Global Programme

We believe that education is the best tool for ensuring that children understand the value of nutrition and healthy lifestyles, throughout their lives. Building on many Nestlé-sponsored education programmes, Nestlé intends to develop partnerships aimed at implementing our Healthy Kids Global Programme in all countries where we have operations by the end of 2011.

Wherever possible, rural communities are included, and this is already particularly the case in India, China, Morocco and Pakistan. New programmes include:

- working closely with the Ministry of Education in Turkey, to provide nutrition education to 70 000 children over the next three years;
- collaborating with the Ministry of Health and Zakoura Education Foundation on a pilot project in the Maghreb region of North Africa, to improve nutritional knowledge and indirectly help to meet micronutrient deficiencies of 530 students in nine schools;
- joining forces with the American University of Beirut to promote nutritional awareness, encourage healthy eating habits and highlight a more active lifestyle among schoolchildren aged 9–11 in Lebanon, and eventually extend the programme across the Middle East;
- a pilot phase of a programme in Pakistan (running from November 2010 to March 2011) to train Care Foundation teachers to disseminate information about affordable nutrition and healthy lifestyles to around 2500 children in 20 Care Foundation School campuses.

Nestlé Health Science

Nestlé has created two new organisations to pioneer a new industry between food and pharmaceuticals. Nestlé Health Science, a wholly owned subsidiary of Nestlé, became operational on 1 January 2011, while the Nestlé Institute of Health Sciences became part of Nestlé's global R&D network. Together, they will enable us to develop personalised health science nutrition for the prevention and treatment of health conditions such as diabetes, obesity, cardiovascular disease and Alzheimer's disease.

Case study

Nido milk products – North Africa

Our recent milk product launches include *Nido Dayem*, an affordable, iron-enriched milk launched in the Maghreb region of northern Africa in 2009. Available in three sizes, it is aimed at mothers in lower-income families and seeks to combat the iron deficiencies that affect a third of preschool-aged children in the region, caused largely by a combination of limited income and a lack of education about nutrition and healthy diets.

BUILDING A BRAND: *Nido* advertising in Casablanca, Morocco.

Working with the Pediatric Association of Morocco and the media, public awareness about the prevalence of iron deficiencies was raised, reinforced by the message that two glasses of *Nido Dayem* contain 60% of a child's daily iron requirements. Around 200 000 mothers were given a product sample and a leaflet about iron deficiency, while a further 90 000 experienced the product at local markets and 2300 attended special education events and seminars.

A similar approach was taken in north-east Africa, where anaemia in children under five is equally prevalent. Roadshows promoting *Nido Essentia* have reached 10 000 people in the Cairo and Delta regions of Egypt, and 38 000 households in 81 villages have received samples and educational leaflets from door-to-door distributors.

Case study

Nestlé Community Nutrition Programme – South Africa

In South Africa, the Nestlé Community Nutrition Programme (NCNP) is a direct response to the challenge of hunger in the country. Through this initiative, we are striving to build the capacity for women and schools to produce food from their own vegetable gardens.

COMMUNITY NUTRITION: Women-led projects that improve the nutritional status of their local communities receive a Nestlé Community Nutrition Award.

This programme supports women and schools who work towards improving the nutritional status of their communities by fostering a culture of gardening as a means to reduce hunger and malnutrition. Its primary objectives are to ensure food security, to encourage women to view growing food as a means to earn an income, and to teach them the importance of proper nutrition and healthy eating habits for themselves, their families and communities.

Case study

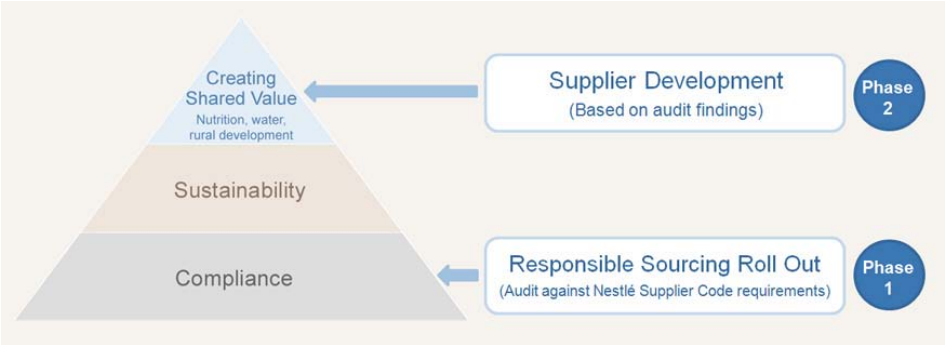
Happy Day Roadshow – Papua New Guinea

Nestlé Papua New Guinea has taken a leadership role in addressing the nutritional deficiencies of the local population, particularly in iodine and iron. Working with the Ministry of Health, Nestlé is helping to educate local people by travelling to 150 of the country's most remote villages with its *Hamamas Dei* ("Happy Day") Roadshow. The events promote the importance of basic nutrition through healthy cooking demonstrations, visual workshops and comprehensive communications focused on health, hygiene and physical activity.

HAPPY DAYS: Hilda Roy, Nestlé's Sampling and Events Manager in Papua New Guinea, runs a nutrition roadshow in Wagang village.

Responsible sourcing

Our supply chains, based on local sourcing, manufacture and consumption, enable us to source high-quality materials, optimise distribution costs and produce reasonably priced products to meet consumer preferences and simultaneously benefit our shareholders. These short supply chains also enable our buyers to have close relationships with local suppliers. A large proportion of them are small to medium-sized entrepreneurs in rural areas close to our factories.



"I have participated in one of the 120 responsible sourcing audits our key suppliers have executed this year. What I really liked is that the process is caring about people. It is not an audit looking at the product manufactured, but at the practices used to manufacture: looking at very simple things like if masks are provided to protect employees against emissions or odours."

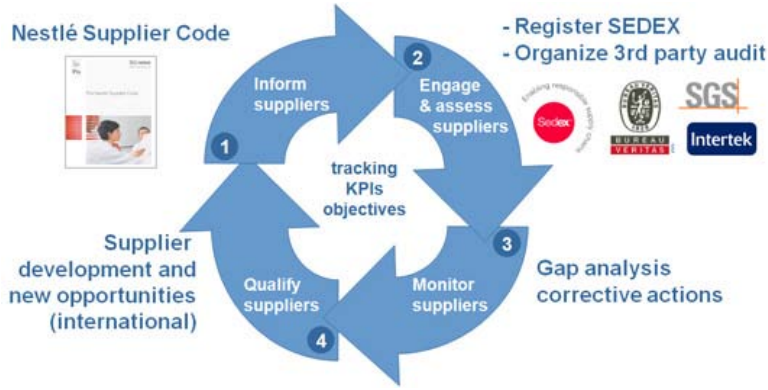
Alessandra Kawamotto
Nestlé Brazil Procurement

Managing supplier relationships

Over 140 years of commercial and technical relationships with suppliers, we have developed in-house expertise in manufacturing operations and ethical practices. Learning from our own internal CARE programme, we are extending our influence to suppliers' ethical practices. We are rolling out a procurement model that includes taking suppliers' ethical practices into consideration, as well as procurement specifications such as quality. This has resulted in us creating the Responsible Sourcing programme, as part of Nestlé's Vendor Approval Process.

The core of the programme is our Nestlé Supplier Code. Responsible sourcing is an internal procurement process for buyers to ensure our suppliers meet the requirements of our Code. Operationally, this means organising ethical audits of our suppliers' sites. Although responsible sourcing is primarily about compliance, we follow up on audit findings to improve our suppliers' practices through corrective action plans: an approach that lies at the core of our Creating Shared Value strategy.

Our approach has four stages:



Our approach has four stages:

Information and communication

To foster good business practices within our supply chain, our Nestlé Supplier Code has been shared with our total supply base of about 165 000 suppliers[10] and 556 600 farmers. Since 2008, we have communicated the Code systematically through our business contracts, and suppliers are required to acknowledge its terms, regardless of their material, service or location.

Engagement and assessment

With the Nestlé Supplier Code globally communicated and acknowledged, we undertook an internal risk assessment in January 2010 to determine which vendors should initially receive our support to achieve compliance with the Code. From the exercise, we selected 1481 key suppliers for Responsible Sourcing ethical audits, covering 90% of our total local purchasing spend and 22% of our total family-grouped vendor base globally.

The first step of the Responsible Sourcing programme is for buyers to ask our key suppliers to register on the non-profit Supplier Ethical Data Exchange (Sedex), the largest independent global database of information exchange on ethical practices. Key suppliers use Sedex's web platform to share their site information, ethical audit report and actions with clients like Nestlé and other members of AIM-Progress. Suppliers then organise third-party responsible sourcing ethical audits on the Code's requirements, such as health and safety, environment, working conditions and business integrity.

Monitoring and gap analysis

Using the audit results, we work with the third-party auditors and suppliers to plan, execute and follow up corrective actions. As of December 2010, 66% [**KPI**] of our 1481 key suppliers [**KPI**] had gone through the ethical audit process, and 56% of those were fully compliant after corrective actions were implemented [**KPI**].

Using third-party auditors, we aim to audit 100% of our key suppliers by the end of 2011.

Supplier development

Engaging more closely with our suppliers has been an excellent way of ensuring we share the same values.

As a result of our Responsible Sourcing programme, we share our ethical knowledge with key suppliers and work with them to continuously improve their operations. Supplier development is further enhanced by addressing sustainability topics such as a supplier's treatment of used water; the adequate installation of fire-fighting equipment; the supply of personal protective equipment and resting facilities for employees; and regular review of working hours and payment systems. We do this in full compliance with local laws and national or international regulations where applicable.

Such involvement can cause complexity and has put Nestlé in challenging commercial situations during 2010, such as suppliers refusing to improve environmental standards or labour practices. However, unless suppliers are rejected, our line of conduct is to seek ongoing improvement and to continue commercial transactions where suppliers remediate within an agreed timeframe.


Picture of a finding during an audit


Picture after remediation

"The Group USJ was a pioneer in Brazil in the elimination of burning sugar cane and in the concept of sustainable business, putting into practice actions concerning social and environmental responsibility, and creating an integrated department of Quality, Health and Safety, Environment and Social Responsibility. With the Responsible Sourcing Audits we have identified points for improvement in our process to further enhance our Integrated Management System."

Duval Santos
Sustainability Manager, USJ

10 Out of our 165 000 vendors, 90% of our total spend is covered by 8025 family-grouped vendors.

Multi-stakeholder programmes

Having direct contact with over half a million farmers, we try to leverage our impact by working with other major food industry players in rural development. A good example is the Sustainable Agriculture Initiative of the Food Industry (SAI-Platform), which we co-founded with Danone and Unilever in 2002. Its 25 members aim to promote sustainable agricultural practices at field level in over 30 countries through six working groups (cereals, coffee, dairy, fruit, potatoes and vegetables, and water and agriculture).

As a member of AIM, the European Brands Association, we also work with other fast-moving consumer goods companies to improve the efficiency and effectiveness of supplier assessments. As a founding member of the AIM-Progress Platform, an initiative of 14 of the world's leading food and beverage companies, we help to determine criteria for supplier performance and promote responsible sourcing practices. Through the platform and in line with suppliers' agreements, responsible sourcing audit reports are shared between members and avoid duplication of work for suppliers.

Through this taskforce, we have also run a number of supplier days in fast-growing markets during 2010 to raise awareness of our requirements for both current and prospective suppliers. For example:

- in June, we organised a supplier event in Russia and attracted 150 regional and local business leaders from more than 75 companies;
- in September, 320 participants from 260 companies, including six CEOs of global food companies, attended a supplier day in Gurgaon, India;
- in October, 400 participants attended a supplier day organised in Chengdu, China;
- in November, 250 suppliers also joined the local representation and supplier day event in São Paulo, Brazil.

Nestlé supplier base

Materials come to Nestlé via either "direct" suppliers (from companies within our 165 000-strong supplier base) or from individual farmers who deliver directly to Nestlé's buying stations. All suppliers, whether direct suppliers or farmers, are covered by the Supplier Code and Responsible Sourcing process. This includes farmers supplying direct suppliers, as in the case of coffee and cocoa.

Our approach ensures that ingredients with a complex supply chain, such as coffee and cocoa, are covered by the Supplier Code, even if they are supplied indirectly via a third party.

Communication, compliance and verification

The Supplier Code has been communicated to all direct suppliers and farmers, as well as Nestlé factories and buying stations; this is a contractual requirement. This communication includes instructions to pass the Code's requirements down the supply chain to their own suppliers and farmers.

"China is not well known for good labour conditions; however, through the Responsible Sourcing audits, we were very happy to demonstrate that our suppliers are sharing the same ethical values as us, and they are keen to learn and improve as necessary."

Cindy Xu
Nestlé China Procurement

Finding during audit

Finding closed after remediation

"We have heard about ethical audits before but were not sure what all the good practices were. Nestlé guided us in closing the minor findings we had and becoming a more reliable supplier as a consequence."

Lu Shi Lou
General Manager, Shuangcheng Haitian Packaging Ltd

Compliance with the Code by our industrial suppliers from "high-risk" countries is verified through audits at their premises by independent third parties, including BVQI, SGS and ITS.

In cases of non-compliance, a corrective action plan and a reasonable timeframe are agreed, supported as appropriate by assistance and training. If a breach of compliance is severe or a supplier is unwilling or unable to adhere to the action plan, immediate steps will be taken to suspend this supplier until such time as the situation has been rectified. This approach of continuous improvement, building on clear expectations and support for suppliers willing to upgrade their practices, creates shared value for both Nestlé and our suppliers. Nestlé managers participate randomly in audits to check the professionalism and robustness of the assessment.

For indirect suppliers – ie, sub-suppliers of "direct" suppliers – Nestlé has a sampling assessment programme. This focuses on 10 categories including coffee and cocoa, and involves sample audit visits and assessments all the way down to farm level.

The implementation of the Code is included in the audit manual of the NGA (Nestlé Group Audit) and is part of the Nestlé Self-Assessment Tool (NSAT). Nestlé auditors verify that the internal procedure related to the application of the Supplier Code to farmers is respected and that any irregularities are reported. Verification is conducted internally, with a pilot for external verification envisaged for 2011.

Farms are assessed on a daily basis during the Nestlé technical assistance visit. During this visit, assessors check that farmers have seen and understood the Nestlé Code.

In addition, working closely with Nestlé, our partners (such as the Rainforest Alliance, 4C Association, UTZ certified and Fairtrade in the case of coffee and cocoa) carry out verifications or audits to ensure compliance with their respective standards.

Training

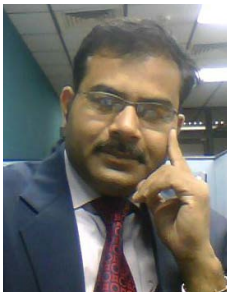
Training at all levels is an integral part of our daily business. It is undertaken regularly, at set times during the year, upon demand for specific aspects, or as and when updates are required, and is driven by the need for continuous improvement.

Internally, during 2010, all 700 of our strategic buyers worldwide had to pass "strategic driving licence" training, which included a formal training chapter on the Supplier Code and its verification through the Responsible Sourcing Programme. In total, some 1250 members of procurement, including the 700 strategic buyers, will have completed this course during 2010.

The Supplier Code also forms part of the training for the Nestlé Agricultural Service Teams, which include 610 agricultural specialists working directly with farmers.

"Indian regulations around ethics are very elaborate and strict, and it is sometimes difficult for our suppliers to interpret the expectations of the law. Nestlé decided to help its suppliers by hiring an external consultant, EHS Ltd, to assist our key suppliers to prepare for the Responsible Sourcing audits. This approach created a sense of confidence in the suppliers and was greatly appreciated. This also became an extension of our supplier development activities."

Dr A.K. Chhonkar
Supplier Development Manager, Nestlé India Ltd.



"On a mandate received from Nestlé, I have visited and assessed 19 Nestlé suppliers in four months. My role was to raise awareness and support them to prepare documents and review ethical practices. All suppliers have been very open and all wanted to be rated as best in class, which is a typical Indian attitude!"

Dr Manish Chandekar
Principal Counsellor, EHS Ltd.

Responsible sourcing – coffee and cocoa

Coffee and cocoa are produced by smallholder farmers who supply Nestlé either directly or via larger companies. The Nestlé Supplier Code has been communicated to all our direct coffee and cocoa suppliers and farmers supplying direct suppliers, as well as Nestlé factories and buying stations (a contractual requirement), again with instructions to pass the Code's requirements down their own supply chains.

Compliance and verification is carried out in the manner as detailed above – audits by independent third parties and on-farm visits of direct suppliers or farmers who are sub-suppliers of direct suppliers. All non-compliances are categorised as minor, major or critical, and follow-up audits are required in the case of major or critical issues. Nestlé conducts spot-checks of audits and also follows up with suppliers to ensure corrective plans are put in place. (Please see "Communication, compliance and verification" on page 83.)

Coffee

The Supplier Code forms an integral part of any green coffee contract. Our Nestlé Quality Control Centres (NQCCs) conduct periodic spot-checks on exporters and their premises to ensure compliance. We are continuing to expand our technical assistance programme, which incorporates training on aspects contained within the Supplier Code and covers more than 10 000 farmers a year.

On 27 August 2010, we announced The *Nescafé* Plan, which will see a doubling of the amount of coffee bought directly from farmers and their associations (referred to as the "Farmer Connect" scheme). With the support of the Rainforest Alliance and the 4C Association, all directly purchased coffee will meet the internationally recognised 4C criteria by 2015 (approximately 180 000 tonnes reaching some 170 000 farmers). In addition, 90 000 tonnes will be sourced according to the Rainforest Alliance and Sustainable Agriculture Network (SAN) principles by 2020. These standards are compatible and compliant with the requirements of the Nestlé Supplier Code. The *Nescafé* Better Farming Support services help farmers to increase production and income, allowing them to make investments in sustainability.

It is Nestlé's ambition to have all "Farmer Connect" operations fully 4C-compliant by 2015. This will go a long way to enabling greater transparency through the independent, third-party verification of compliance of a large number of farming communities.

Currently, there are no plans to market certified coffee to consumers (ie, coffee carrying a certification seal on the label). However, *Nescafé*'s approach is to assist farmers in improving the quality and productivity of their crop in a sustainable manner. We are using the 4C verification code and the SAN certification standards to measure, monitor and verify progress. Farms that comply with the SAN standard may choose to be audited to achieve the certification diploma.

"When managing strategic suppliers, it is a key challenge to get their full buy-in, from the corporate level to all their operations across Europe. Nordenia has been one of the first suppliers to answer positively to our responsible sourcing programme and has been a reference point, enabling others to embark on this journey."

Emmanuel Reye
Nestlé Zone Europe Procurement

"At Nordenia, ethical practices are entirely part of our sustainability strategy and daily operational activities. Demonstrating compliance against the Nestlé Supplier Code was, for us, logical and we appreciated the fact that the responsible sourcing audit report was also valid for clients other than Nestlé."

Andrea Steinkamp
Key Account Manager, Nordenia GmbH

Cocoa

The Cocoa Plan sets out a comprehensive framework of direct cooperation with cocoa farmers. As part of this initiative, we hold field schools to help farmers to increase their yields and to apply responsible working practices. In Côte d'Ivoire, for example, 1500 farmers have attended this training; a further 3000 will be trained in 2011 and 30 000 farmers will be trained over the next 10 years. In addition, our new R&D Centre in Abidjan will supply farmers with 1 million higher-yielding, stronger cocoa trees each year from 2012, helping to improve their cocoa quality, increasing incomes and bringing benefits to themselves and t heir families.

Nestlé is also working closely with partners like UTZ certified, as a co-founding member of its Steering Group on cocoa, and Fairtrade, working together with the Kavokiva Cooperative in Côte d'Ivoire that supplies cocoa for the Fairtrade-certified *KitKat* sold in the UK.

On actions to eradicate child labour – a specific requirement of the Supplier Code – a project has begun with the International Cocoa Initiative (ICI) to sensitise 20 communities that supply cocoa to the Kavokiva Cooperative.

Outreach

Creating Shared Value Advisory Board

To increase our positive impact on society, Nestlé set up the Creating Shared Value Advisory Board in early 2009. The Board members, who were appointed for three years and meet twice a year, include a number of internationally recognised experts in rural development, including Joachim von Braun from the University of Bonn, Jeffrey D. Sachs of The Earth Institute, Ajay Vashee, President of the International Federation of Agricultural Producers and Robert L. Thompson of the University of Illinois in Urbana-Champaign, who wrote the Global food security and rural poverty, Reducing rural poverty and Nestlé's contributions to rural development sections of this report.

As well as acting as direct advisors to the Nestlé Chairman and CEO, the Board leads the annual CSV Forum, which was first held in New York in April 2009, and has applied its expertise in rural development to provide a report detailing how and where Nestlé should be prioritising its future rural development activities.

Nestlé Prize in Creating Shared Value

There are many great examples of Creating Shared Value in practice or in planning from the private and not-for-profit sectors. To incentivise development of the best examples of this idea worldwide, we have launched the Nestlé Prize in Creating Shared Value. The Nestlé Prize is awarded every other year to an individual, an NGO or a small business for an outstanding project in the area of water, nutrition or rural development.

In May 2010, the inaugural Nestlé Prize in Creating Shared Value was presented to International Development Enterprises (IDE) Cambodia, a non-profit organisation whose mission is to create income opportunities for poor rural households (see next page). IDE's project was selected by the Nestlé Creating Shared Value Advisory Board from more than 500 applications.

Nestlé Prize in Creating Shared Value 2010 winner – IDE Cambodia

Around 90% of Cambodia's poor live in rural areas, and depend primarily on agriculture for their livelihood. Cambodian farmers can improve their standard of living by growing and selling vegetables; however, many lack the necessary technical know-how, farming equipment, access to credit or market information to exploit this opportunity.

AWARD-WINNING ADVICE: Farmer Yan Reach (right) discusses farming techniques with Puth Saroeun, a Farm Business Advisor for IDE Cambodia.

Since 2005, IDE Cambodia has responded to this situation by recruiting and training small rural entrepreneurs to become franchised Farm Business Advisors (FBAs). Their role is to assist farmers to initiate, intensify or expand their production of market-oriented vegetables by providing a range of supporting products and services. Through this approach, value is created for both farmers, who become more effective producers and marketers, and FBAs, who earn additional income from selling their products and services.

To date, IDE's project has increased the productivity among more than 5500 smallholder farmers in rural Cambodia, boosting their income and increasing their standard of living. The prize of CHF 500 000 (approximately USD 510 000) will help to extend the reach of the FBA programme to impact an additional 20 000 people in over 4000 rural households.

The project illustrates what Creating Shared Value is all about. If the farmers are successful, the FBAs are too. The system flourishes only if there is real shared value being created at the farm level, so everyone involved in the project is committed to investing in the farmers' success.

Creating Shared Value "Forum in Focus"

On 22 November 2010, Nestlé – with the participation of the Centre for International Governance, Graduate Institute of International and Development Studies – held a Creating Shared Value "Forum in Focus" entitled *Ensuring Food Security: What Role for Business?*

Building on the 2009 FAO World Summit on Food Security and the renewed focus on the Millennium Development Goals, this forward-looking conference – held at the World Meteorological Organization in Geneva before a live and online audience – addressed business' engagement in enhancing agricultural productivity while considering environmental impacts, and the cross-sector partnerships used to tackle these issues.

Business leaders, NGOs, international organisations, academics and representatives from civil society were among the attendees who debated the role of business in ensuring global food security.

Looking forward

Nestlé CSV Advisory Board

Please note: *The opinions in this section are those of the Nestlé CSV Advisory Board members, and are based on an Advisory Board meeting held in November 2010. The content has not been verified by our independent assurers.*

In essence, the Creating Shared Value Advisory Board, acknowledges Nestlé's clear leadership in the area of rural development and recommends that Nestlé "steps up what is being done already". Current rural development efforts need to be showcased and knowledge shared proactively. Based on its own experience, Nestlé needs to build the business case for further rural development.

Increased advocacy

As the world's largest food company and with operations in so many countries, Nestlé must increase its advocacy role in support of rural development as a critical element of any poverty reduction strategy. The greatest contribution Nestlé could make to rural development is for its senior executives – who have access to top-level national and international leaders around the world – to play a more active role in getting agriculture and rural poverty reduction back onto the development agenda of low-income countries, as well as high-income countries' official development assistance and international development bank lending. The past decade has been characterised by an urban bias to development aid and investment. Some rurally focused investments were made in health and education but little in agriculture, seeds, research and development; Nestlé must advocate for a more balanced approach.

Additional concern was raised about the fact that two-thirds of land investment in Africa is currently focused on biofuels; "no food for fuel" must continue to be a core advocacy message. There is potential to help to build an understanding among civil society, governments and development agencies of the need for long-term investments in agriculture and non-farm employment, as well as an increase in research funding; the inclusion of the fundamental link between agriculture and nutrition; the right to land ownership; and the role of women in agricultural development. An active approach to and engagement with advocates in areas such as climate change, new technology and deforestation must also be included.

Concern was also expressed regarding the focus on commodity speculation as the only cause of food insecurity and its growing political momentum. Nestlé should play its part in helping to foster a better understanding of the role and potential of business in development. Land ownership is also a critical hurdle to rural development, especially in sub-Saharan Africa.

Focused investments

Public investments are needed in rural public goods that will make rural areas more attractive places for the private sector, including Nestlé, to invest in, for example, rural infrastructure, education and healthcare, and agricultural research. Nestlé should continue – and even increase – its long-term approach to investment in rural development, characterised by its willingness to invest in emerging regions like sub-Saharan Africa. This region has the greatest incidence of rural poverty in the world and is the only region whose population is expected to more than double between now and the middle of this century; it also has the largest area of potentially arable land that is not presently forested. Specifically, Nestlé should increase its research investment in soils, fertilizers and seeds.

The impact of Nestlé factories, of which half are located in developing countries and an estimated 60% in rural areas, cannot be underestimated. Additional recommendations included the creation of more farmer marketing cooperatives, using Nestlé facilities for schools, and increasing Nestlé's focus on specific investments in women farmers. Nestlé needs to continue to invest in the farmers and farm organisations, and to galvanise other companies and organisations to collaborate on infrastructure investments.

Linking agriculture and nutrition

Today, nutrition efforts are viewed separately from rural development and agricultural challenges. Different organisations set separate agendas and these need to be better linked. Nestlé is in a unique position to share its experience in rural development, increasing incomes and improving nutritional status (for example through the development of milk districts, nutrition education and the development, production and distribution of affordable fortified milks). The Advisory Board felt it to be critically important to link rural development with food and nutrient security. Nestlé's work to address the double burden of malnutrition must continue to be linked to its rural development initiatives.

In summary, the group felt that Nestlé is a clear leader in rural development and that the 2011 CSV report, alongside additional analysis, advocacy and investment, were essential to maintaining that leadership and reducing rural poverty while enhancing food security.

Bureau Veritas' Independent Assurance Statement

To: The Stakeholders of Nestlé S.A.

Introduction

Bureau Veritas Solutions has been engaged to provide external assurance to the stakeholders of Nestlé SA (Nestlé) over its Creating Shared Value and Rural Development Report 2010 (the CSV Rural Development Report) and the Creating Shared Value KPI table and related KPI Performance statements (online KPI Update) of the Nestlé website [www.nestle.com/csv]. The preparation of both the content of the CSV Rural Development Report and the online KPI Update section of its website is the sole responsibility of Nestlé.

Building on the previous three years, the assurance process was designed to understand how Nestlé continues to identify its material risks and emerging issues in a changing environment, and to challenge Nestlé's in its CSV implementation, performance and reporting.

The objectives, scope, methodology, limitations and exclusions of our work are detailed below.

Objectives of assurance

The objectives were to:

1. provide moderate assurance over the stated content of both the CSV Rural Development Report and online KPI Update section of its website for the reporting period; and

2. provide an impartial commentary on the implementation of CSV, its reporting process and associated systems and, where appropriate, propose recommendations for future development.

Nestlé recognises the need for a robust, transparent assurance process to ensure continued credibility and to act as a tool to drive continual performance improvement in its CSV implementation and associated external reporting. Therefore, in addition to our commentary on the reporting processes, we also provide further recommendations below based on this period's assurance, with more detail included in a separate report to the management of Nestlé.

Scope and methodology

The scope of the assurance included:

1. a review of relevant CSV activities undertaken by Nestlé over the reporting period 1 January 2010 to 31 December 2010;

2. a review of information relating to Nestlé's CSV issues, implementation, responses, performance data, case studies and underlying systems to manage relevant information and data; and

3. an evaluation against the Global Reporting Initiative (GRI) G3 Sustainability Reporting Guidelines.

To conduct the assurance, we undertook the following:

- verification of performance data and factual information contained within the CSV RD Report and the online CSV Update;
- interviews and follow-up communication with 34 key management staff predominantly at Nestlé's Head Office in Vevey, Switzerland; and,
- review of processes for identification and collation of relevant information, report content and performance data from global group operations.

Opinion

Based on our work, it is our opinion that the CSV Rural Development Report:

- further advances Nestlé's evolving suite of CSV reports with responses to key challenges and issues it faces related to rural development, providing readers with additional understanding and context;
- includes information that is reliable, understandable and clearly presented, providing a comprehensive account of rural development based activities that are core to the CSV strategy, and performance by Nestlé over the reporting period;
- identifies and reports upon key material issues to which Nestlé needs to be a significant contributor; and
- is orientated towards the international development community as the audience of main interest, and to whom Nestlé's response is clear and comprehensive.

Based on our work, it is our opinion that the online KPI Update:

- progresses Nestlé's CSV performance related reporting with updated responses to some of the key challenges it faces, providing readers with continued understanding and context;
- includes information that is reliable, understandable and clearly presented, and provides an accurate account of relevant activities and performance over the reporting period on CSV related activities from across the business;
- presents a continuation of discussions around main issues introduced in previous CSV reporting and as such, does not omit any issues considered to be of material importance.

Evaluation against Global Reporting Initiative (GRI) G3 Sustainability Reporting Guidelines

Bureau Veritas undertook an evaluation of Nestlé CSV related disclosures on the Nestlé website [www.nestle.com/csv] against the G3 Sustainability Reporting Guidelines. This included cross checking the GRI index table against all listed documents to provide an opinion on the self declared GRI application level.

Based on our work, it is our opinion that www.nestle.com/csv has been prepared in accordance with the GRI Reporting Framework including appropriate consideration of the Reporting Principles and necessary indicators to meet the requirements of GRI Application Level B+.

Progress and Recommendations

- Stakeholders would benefit from a clearer explanation of the process for determining material issues, as well as those considered insufficiently material to include in reporting.
- Nestlé continues to provide a balanced account of its present position and performance, in particular through increased explanation of the CSV concept throughout the value chain. Although Nestlé has continued to include details of both its own and industry-led compliance auditing activities, as a key area of stakeholder interest, this is still an area that Nestlé could elaborate on to further improve transparency about its actual performance and minimisation of its impacts.
- The CSV Rural Development Report is reliant on case studies to demonstrate Nestlé activities and as such is relevant to this point in time. Stakeholders will expect future reporting in this area to be more performance orientated and as such Nestlé needs to focus its efforts in developing a methodology to measure the impacts (and benefits) of its rural development projects on a comparable basis across its markets.
- Nestlé's addressing of concerns relating to the procurement of palm oil raised during the reporting period is seen as a positive example of responding to stakeholders.
- The inclusion of independent commentary from key opinion leaders that form the Nestlé CSV Advisory Board is a positive step towards including the views of stakeholders in its reporting that could be expanded upon in future cycles to include other stakeholder groups such as NGOs more fully.
- As noted in our previous statements Nestlé's increased use of the internet for reporting and communicating CSV concepts and performance is a positive development. Nestlé could more fully explore developing online platforms towards providing stakeholders with dynamic reporting of compliance and performance information.
- To date, Nestlé engagement with consumers has been largely focused around nutritional programmes such as 60:40 and PPP and as such it has not really engaged consumers on environmental sustainability and commodity sourcing issues. Nestlé's launch of the *Nescafé* Plan (and previously the Cocoa Plan) represents some of the first marketing campaigns it has used to present its performance and objectives in these areas. These campaigns could be used to further engage consumers on environmental sustainability and commodity sourcing issues to ensure a comprehensive and balanced understanding of consumer needs, expectations and concerns.

This opinion has been formed on the basis of, and is subject to, the inherent limitations outlined below in this independent assurance statement.

Limitations and exclusions

Excluded from the scope of our work is information relating to:

- activities outside the defined reporting period and scope;
- statements of commitment to, or intention to, undertake action in the future;
- statements of position, opinion, belief and / or aspiration;
- any additional content hyperlinked from www.nestle.com/csv that is not specifically identified as having been assured by Bureau Veritas; and
- content that presents the opinions of external parties.

Much of the operating financial data in both the CSV Rural Development Report the online KPI Update is referenced from Nestlé's Annual Reporting and Accounts, which is separately audited by an external auditor and therefore excluded from the scope of the Bureau Veritas assurance.

This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Statement by Bureau Veritas of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in quality, health, safety, social and environmental management advice and compliance with over 180 years of history in providing independent assurance services and an annual turnover in 2009 of EUR 2.65 billion.

Bureau Veritas has implemented a Code of Ethics across its business which ensures that all our staff maintains high standards in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

Bureau Veritas has a number of existing commercial contracts with Nestlé. Our assurance team does not have any involvement in any other projects with Nestlé outside those of an independent assurance scope and we do not consider there to be a conflict between the other services provided by Bureau Veritas and that of our assurance team.

Our assurance team completing the work for Nestlé has extensive knowledge of conducting assurance over environmental, social, health, safety and ethical information and systems, and through its combined experience in this field, an excellent understanding of good practice in corporate responsibility reporting and assurance.

Bureau Veritas Solutions
London
March 2011