

More Growth Than Good

A Closer Look at Syngenta's Good Growth Plan

 **BD**
Berne Declaration
Déclaration de Berne
Erklärung von Bern



Table of Contents

1.	Introduction	03
2.	Analysis of The Good Growth Plan	06
2.1.	Make Crops More Efficient	06
2.2.	Rescue More Farmland	10
2.3.	Help Biodiversity Flourish	12
2.4.	Empower Smallholders	14
2.5.	Help People Stay Safe	16
2.6.	Look After Every Worker	18
3.	Conclusions	20
4.	Bibliography	21

Imprint:

Publisher: The Berne Declaration
Authors: Tamara Lebrecht, François Meienberg
Editor: Marion Graber
Layout: Andrea Münch
Picture: Jason Larkin/Panos Pictures
Translation: Jim Rudolf
September 2014

1. Introduction

In recent years, numerous corporations have developed a program for Corporate Social Responsibility (CSR), and anchored it in their business models. In addition to growing public awareness of CSR, the United Nations Guiding Principles on Business and Human Rights also call on corporations to recognize their obligations of due diligence and compensation for damages caused by human rights violations.

Syngenta, a Swiss agrochemical corporation, also wants to make a commitment to sustainable and responsible behavior, and it has developed a corresponding Good Growth Plan. Syngenta is effectively obliged to act, as shown by a global survey (Syngenta, 2013) that the company presented at the launch of its Good Growth Plan. According to the survey results, industrial agriculture – and consequently also Syngenta – suffer from an image problem. The survey, carried out in 13 countries, found that roughly 69% of respondents felt that fewer pesticides should be used to produce more food for the rising world population; 75% said that more organic agriculture should be used to reach this goal.

In addition, Syngenta participates in initiatives such as the United Nations Global Compact, a voluntary agreement between corporations and the U.N., in which these corporations promise to adhere to the 10 principles of the Global Compact, regarding human rights, labor norms, and the environment.

In this report we examine Syngenta's Good Growth Plan with regard to its formulated goals, the chosen indicators, and the envisaged steps towards implementation. The central question is: To what degree does Syngenta fulfill its corporate responsibility with this plan?

1.1 The Good Growth Plan

On 19 September 2013, Syngenta presented its six-point plan for responsible growth – The Good Growth Plan – to various interest groups in Washington, DC, Brasília, Brussels, Jakarta and Zurich. The plan, to be implemented by 2020, has as its goals: to promote resource efficiency, to regenerate ecosystems, and to strengthen rural communities. In addition, Syngenta seeks partnerships with different organizations such as the U.S. Agency for International Development (USAID), the U.N. Convention to Combat Desertification (UNCCD), and the Fair Labor Association (FLA).

In The Good Growth Plan, Syngenta commits to the following steps, according to its website:

More food, less waste

1. Make crops more efficient

More biodiversity, less degradation

2. Rescue more farmland
3. Help biodiversity flourish

More health, less poverty

4. Empower smallholders
5. Help people stay safe
6. Look after every worker

Interestingly, these commitments coincide almost exactly with those from a document entitled Sustainability Report 2012, published by Syngenta competitor Monsanto in 2013: “We work to deliver agricultural



Image 1: Advertisement for Syngenta's Good Growth Plan. Source: Syngenta website; www.syngenta.com (Accessed: 20 July 2014)

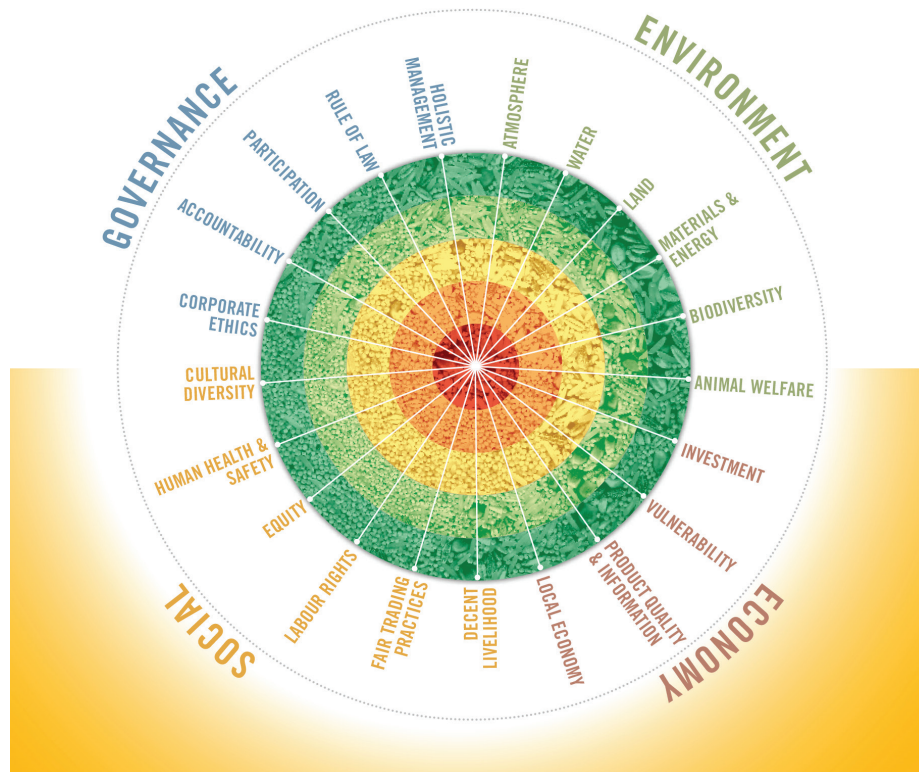


Illustration 1: Indicators for the sustainability assessment of agricultural and food systems. Source: FAO 2013a

products and solutions to help: meet the world's growing food, energy and fiber needs; conserve natural resources and protect the environment; improve lives" (Monsanto, 2013). Even the order in which Monsanto's goals are listed is identical to those of Syngenta.

1.2 Sustainable Agriculture: Syngenta's Own System Boundaries

The fundamental question arises as to whether Syngenta's approach, as well as the selected goals and indicators, are a suitable method to assess the sustainability of agricultural systems. Compared to other instruments, Syngenta's rating system appears to be restricted and simple. It gives the impression that the goals and indicators were chosen very selectively, in order to shine the most positive light on Syngenta's activities. One wants to be assessed only where one can shine.

The U.N. Food and Agriculture Organization (FAO), and its Sustainability Assessment of Food and Agriculture Systems (SAFA), shows what an integral assessment of agricultural production could look like. This approach goes far beyond Syngenta's defined goals and

indicators, and attempts to view the agricultural system holistically (Illustration 1). If we take this system and its indicators as a reference for the assessment of sustainable agricultural systems, we must conclude that the indicators selected by Syngenta for the assessment of the sustainability of an agricultural system are inadequate, and do not meet the level found in current research (the details of which are discussed below). Accordingly, the possible attainment of Syngenta's goals would give no insight into whether the corporation made a contribution to sustainable development or not, because Syngenta does not examine if, by the achievement of its own goals, other indicators of sustainable agriculture would be negatively affected.

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD, 2008), and its slogan, "Business as Usual is Not an Option!" marked the start of a rethinking. Increasingly, it was said that a paradigm shift in agriculture was needed in order to produce enough food in the future for a rising global population. The Foresight Report of the European Union Standing Committee

on Agriculture Research (SCAR) (EC, 2011) spoke of a “paradigm of sufficiency,” which also placed consumption as well as production center stage. The FAO spoke of Sustainable Crop Production Intensification (SCPI) (FAO, 2011b). And an UNCTAD report called for a paradigm shift from a “green revolution” to “ecological intensification.” Monoculture-based industrial production with its high external inputs should give way to a smallholder, more labor-intensive, and sustainable production system. To do so, the multifunctionality of agriculture must be recognized and promoted. One approach is agroecology. The term describes a science, a set of practices, and a social and political movement (Wezel et al., 2009). According to Olivier De Schutter, former U.N. Special Rapporteur on the Right to Food, agroecosystems have the potential to double food production in critical regions within 10 years, while simultaneously reducing poverty and diminishing climate change (United Nations General Assembly, 2010).

Ulrich Hoffmann, Head of Trade and Sustainable Development for UNCTAD, has said: “One of the most ef-

fective ways of halving both the number of hungry and poor by 2015 is to take the necessary steps of transition towards more sustainable forms of agriculture that nourish the land and people and provide an opportunity for decent, financially rewarding and gender equal jobs” (UNCTAD, 2013). Smallholders in rural areas must have access to affordable food and the necessary means of production.

According to Syngenta’s 2014 Annual Report, 75% of revenue in 2013 came from pesticides (Syngenta, 2014). A paradigm shift in agriculture, towards agroecological farming methods with lower pesticide use, would cause considerable harm to Syngenta’s core business. In early 2008, as the final draft of the IAAS-TD was presented, the governments of the U.S., Canada and Australia, together with Syngenta and the international agroindustry federation CropLife, opted out of the process at the last minute. Clearly, Syngenta wishes to prevent a paradigm shift, and therefore tries to deal only with certain aspects of the current system – a system that, according to many experts, is a dead end.

2. Analysis of The Good Growth Plan

Our analysis examines the goals of Syngenta's Good Growth Plan with regard to goal definition, actions, and goal measurement (see Illustration 2).

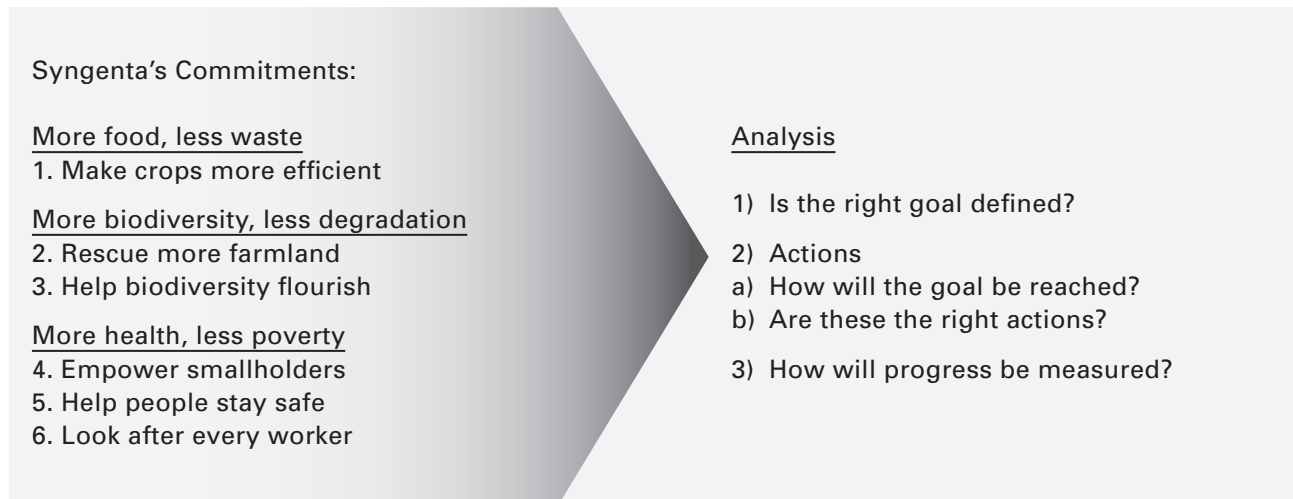


Illustration 2: Syngenta's Commitments from its Good Growth Plan and the analysis in this report. Source: Own illustration

2.1. Make Crops More Efficient

Goal 1: "Make crops more efficient by increasing the average productivity of the world's major crops by 20 percent without using more land, water or inputs."¹

2.1.1. Is the Right Goal Defined?

Syngenta identifies two goals: raise the productivity of crops, and use no additional resources. However the indicators show that the total numbers for resource use are missing. In their Good Growth Plan documents, Syngenta speaks not only of increased productivity, but also of a necessary "huge increase in production" in order to feed the global population (Syngenta, 2014a). To do this, Syngenta clearly wants to produce more food without using more resources.

No causal link between higher food production and hunger

However, Ulrich Hoffmann writes in the UNCTAD Trade and Environment Review that it is the wrong approach to still focus on higher production ("get more with less") and the expansion of a "somewhat less polluting" industrial agriculture. We already produce enough food to feed 12 to 14 billion people (UNCTAD, 2013). Still, over 860 million people suffer from hunger, according to the FAO (FAO, 2013). There is no direct causal link between a rise in production and a

¹ This and all following quotations describing Syngenta's goals come directly from The Good Growth Plan.

global decline in hunger. Increased food production is therefore no guarantee that the growing global population can be fed. Rather, the problem is that the crops produced are, on the one hand, not exclusively and efficiently utilized as food, and on the other hand, they are not distributed according to need:

- Many people lack access to affordable food. A central cause is rampant poverty. Rising food prices (due to increased biofuel production or food speculation, for example) is another reason.
- A large portion of agricultural products is used to feed livestock and for the production of biofuel, or is lost due to aftercrop loss and waste.
- In the U.S., 40% of the corn harvest is used to make ethanol (USDA, 2014; Ranum et al., 2014).
- 98% of global soy meal is used for animal feed (Hartman et al., 2011)
- According to a calculation by the U.N. Environment Program, the calories that go into cereals to feed livestock could instead potentially feed an additional 3.5 billion people (UNEP, 2009).
- Roughly a third of global food production – about 1.3 billion tons annually – is lost or wasted (FAO, 2011a).

High revenue from livestock feed production and biofuels

In 2013, 40% of Syngenta's revenue came from pesticides and seed for corn and soybean cultivation (Syngenta, 2014), which serve primarily not as food for humans, but rather for livestock feed and biofuel production. Syngenta also supports the biofuel industry financially: In 2013, it committed to give US \$1 to the biofuel industry for every acre in the U.S. cultivated with its Enogen corn over a three-year period. (Syngenta, 2013a). Syngenta is also a member of numerous associations that promote the spread of biofuels. To increase the production of these crops does not increase food production, and in fact, it is in conflict with the primary aim of "More food, less waste."

A one-sided approach: Concentration on a few crops. The focus on today's most important global crops, which Syngenta does not name, is short-sighted in

terms of food security and sustainability. It reinforces the failures of the past, whereby private research and development has concentrated on a few crops and thereby contributed to the loss of diversity in the agrarian system. Many sustainable practices that are successful in developing countries (such as agroforestry) are based on local and traditional varieties, and on intercropping. These practices promote biodiversity and healthy soil. In contrast, monocultures extract important nutrients from the soil and do not allow time for the soil to recover. Monoculture also makes the plants susceptible to pests and disease. And this in turn leads to an increase in the use of pesticides.

Maintaining the quality of resources, for example from pesticide contamination, is not mentioned

The goal should not only be to use less water, but also to ensure that the water is not contaminated by pesticides. The water should be tested regularly for pesticide residues. If values rise too high, the source of the toxic substance must be eliminated. The results must be transparent. Here Syngenta would have more opportunities to make a difference, and a greater responsibility to introduce improvements than by water usage; however water quality is never mentioned in Syngenta's commitments. The same holds true for other resources, for example farmland. It should not only be about not increasing resource usage, but above all to use the resources sustainably.

An efficient use of pesticides is also commendable, but in the end it is not only the quantity of pesticides used, but more importantly their toxicity. If more toxic pesticides are used in the future, in order not to exceed the quantities used today, then that would miss the point completely. Pesticide use must be reduced, not only in terms of quantity, but also in terms of toxicity.

The FAO's SAFA system, mentioned above, shows how an integral approach to the problem might look. With water, it's clearly not just the volume used, but also the water quality (for example, the protection of water from pesticide contamination). And for pesticides, the use of highly hazardous substances is a clearly negative criterion (FAO, 2013a).

2.1.2. Actions

a) How Will the Goal be Reached?

“By applying our unique breadth of technologies and integrated strategy, augmented by collaborations with partners.”

(Syngenta, 2014)

“In developing countries, where current input use per hectare is often very low, we will tailor the best solutions available to ensure from the outset the same resource efficiency we achieve in more developed growing systems.”

(Syngenta, 2014)

In order to counteract the consequences of climate change, Syngenta wants to develop safer and more efficient solutions that help small and large farmers adapt to changing conditions. These solutions contain conventional as well as genetically modified seeds, chemical and organic pesticides, and a number of irrigation systems and planting machines from its partners.

A Syngenta case study based on The Good Growth Plan:

Corn is particularly sensitive to the lack of water. Therefore corn growers need to supplement rainfall with irrigation. Syngenta, together with crop irrigation equipment manufacturer Lindsay, developed an integrated solution to help growers in the U.S. Corn Belt maximize their productivity with minimal water use. This solution combines Syngenta’s drought-resistant seeds, tailored crop protection protocols and water management practices with above- and below-ground environmental sensors and automated irrigation.

Moreover, Syngenta states that it is also a member of the Water Resources Group. This public-private partnership supports government officials and their partners in the implementation of reforms for the sustainable management of water resources. These reforms are meant to provide incentives for farmers to increase their water efficiency. In addition, farmers need a good understanding of water conservation technologies, access to financial aid, affordable credit, and an insurance system for weather-related crop failures.

b) Are These the Right Actions?

Syngenta wants to sell seeds and the accompanying products (it refers to its “unique breadth of technologies”), and intensify agriculture, which will increase sales (“in developing countries, where current input use per hectare is often very low”). As a result, it will notably create new markets in developing countries. This cannot be a goal of sustainability.

In general, intensified agriculture involves dangers for soil fertility and drinking water: Unbalanced nutrient removal will degrade the soil, and pesticide and fertilizer residue will contaminate the water. Syngenta’s solutions may lead to increased revenue for some farmers, but it is questionable whether revenue alone can be the deciding factor to judge the productivity of the system. According to Adrian Müller and Urs Niggli (UNCTAD, 2013), external production costs as well as social or environmental costs must also be internalized. AgBalance™, a process of the BASF chemical company to measure and assess sustainability in agriculture, considers these factors in its calculations. BASF includes 69 indicators that relate to economic, ecological and social criteria. To determine economic sustainability, not only is the productivity of a farm examined; the profit/cost for fertilizer and pesticides, for example, are also included (BASF, 2011).

In developing countries, Syngenta’s solutions can lead to higher production costs for farmers, and to their dependency on Syngenta: The purchase of high-yield varieties, fertilizer, and pesticide lead to higher expenditures. Moreover, seeds protected by breeders’ rights or patents may not be sown again the following year; they must be purchased annually. The same applies to high-yield hybrid varieties, whose saved seed usually does not produce an acceptable yield.

All of the concrete actions mentioned relate to the more efficient use of water. What remains unclear is what the other “best solutions available” are. Syngenta refers to an example in the U.S., where water efficiency for corn could be raised by using Syngenta’s drought-resistant corn and an irrigation system by Lindsay. The company also wants to replicate those results in various countries and with different crops, although it is doubtful that such a high-tech approach could also be used for food production in poor countries. Lindsay’s irrigation system was developed primarily for the production of biofuel and not food (Zimmatic, 2010).

Concrete actions, particularly related to the efficiency of nutrients, pesticides and energy, are not mentioned.

2.1.3. How Will Progress be Measured?

“By quantifying ‘input use per unit of output produced’ on reference farms for each crop in every region.”

(Syngenta, 2014)

According to Syngenta, resource use includes soil productivity and the efficiency of: nutrients, pesticides, applications, water and energy.

The Good Growth Plan does not make clear how many reference farms there are, what exactly is being measured, and over what period of time. For example: When considering energy efficiency, is the gray energy hidden in fertilizer and pesticides being measured? Is application efficiency as an indicator as important as the others? And in general, how will the different efficiencies be aggregated, in order to quantify total resource use? It appears to be an open question whether all potential productivity increases lead back to Syngenta (attribution gap). Do the reference farms only use inputs from Syngenta? Due to a lack of details on the Syngenta website, this report cannot answer these questions. The difference between a short-term increase in efficiency and a sustainable solution must also be distinguished.

Increased Glyphosate use leads to negative effects

An example of a short-term rise in production with disastrous social and environmental costs is Syngenta’s version of Monsanto’s Roundup Ready System, in which the company’s genetically modified seed is resis-

tant to the herbicide Glyphosate. With the introduction of this system, it became possible for farmers to spray their fields with Glyphosate during the entire growing period, which led to a considerable rise in Glyphosate use (Benbrook, 2012). Syngenta also sells herbicide with the active ingredient Glyphosate – under the product name Touchdown™ – as well as seeds resistant to it. While this growing system leads to increased yields for the first few years, soon the negative effects can be seen. For example, various weeds have developed resistance to Glyphosate. This leads to increased costs for farmers who must use more herbicide more often, or use more dangerous herbicides, or resort to other methods, to achieve the same effect. One solution of the larger agrochemical corporations is to develop new seeds that are resistant against older, more toxic and harmful pesticides such as Dicamba or 2,4-D, the latter of which is an ingredient of the defoliant Agent Orange. In addition, the companies are developing seeds with various combined resistances. For example, Syngenta applied for approval of a plant variety that contains characteristics of six different genetically modified plants, including resistance to Glyphosate, Glufosinate, and other insecticides found naturally in plants.

In order to estimate whether Syngenta’s “best solutions available” are suitable for a sustained increase in production, it must first be made more transparent which strategies the company is pursuing to make crops more efficient. This information is missing from The Good Growth Plan. Regardless, investing in new herbicide-resistant varieties is not a productive way to feed a growing population.

2.2. Rescue More Farmland

Goal 2: “Rescue more farmland by improving the fertility of 10 million hectares of farmland on the brink of degradation.”

2.2.1 Is the Right Goal Defined?

The goal of stopping soil degradation is acknowledged internationally (Agenda 21, Chapter 14). However the objective is not clearly defined. By how much should fertility be increased?

2.2.2. Actions

a) How Will the Goal be Reached?

“Plowing for weed control is a major cause of soil loss, leaving fertile earth more vulnerable to wind and rain erosion. We will help farmers increase fertility and productivity sustainably by improving soil structure and adding organic matter through appropriate use of fertilizers, crop rotation and techniques to avoid needless plowing. With partners, we will share soil management knowledge through the UNCCD Soil Leadership Academy.”
(Syngenta, 2014)

A Syngenta case study based on The Good Growth Plan:

Potato farmers in the Cundinamarca region of Colombia lose 20 tons of soil per hectare annually, due to the continual planting of potatoes. In order to sustainably raise productivity, Syngenta is working together with local authorities to create a program called Conservando Mi Tierrita (Preserving My Land), that teaches soil conservation techniques, such as minimal plowing, to smallholders.

b) Are These the Right Actions?

Important soil improvement actions like the appropriate use of fertilizer or reduced plowing are mentioned. However the concrete implementation is not totally clear. Syngenta sees plowing for weed control to be one of the main causes of the loss of farmland; the company scarcely addresses other causes in The Good Growth Plan. But according to the FAO (FAO, 1994), there are a multitude of other causes for soil loss in agriculture.

Appropriate use of fertilizer

For the best soil fertility, it is essential not to apply too much fertilizer. But farmers should not only be instructed how to use mineral fertilizer responsibly. Just as important is information about how to use organic fertilizer, like compost or mulch, instead of chemical fertilizer, or how to increase the nitrogen content of the soil by cultivating nitrogen-fixing legumes.

Minimal tillage

The Good Growth Plan does not make clear which methods Syngenta will promote to reduce plowing. On Syngenta’s website for Paraquat (www.paraquat.com), Syngenta states that this non-selective herbicide makes zero-tillage and a direct-sowing system possible. Using more Paraquat and other toxic pesticides in order to plow less is not a sensible solution to increase soil fertility. Industrial agriculture with intensive pesticide use and large-scale monoculture crops is one reason for soil degradation. It thus raises the question as to how well Syngenta’s approaches will work in the long-term, and if there are negative consequences that Syngenta’s system is ignoring.

A more sensible solution would be an alternative growing system that does not exhaust the soil. One possibility is to integrate trees into agricultural systems, for example as agroforestry systems do. According to Robert R.B. Leackey (UNCTAD, 2013), this has many advantages:

- land on slopes is protected from erosion
- water filtration is improved
- carbon is fixed
- biodiversity is enhanced
- new revenue can be generated
- farmers can minimize the risk of dependence on one crop
- the functioning of the agrarian system is encouraged

Since the sale of pesticides is part of Syngenta’s core business, we see a conflict of interest between the sustainable conservation of soil and the company’s current business model.

2.2.3. How Will Progress be Measured?

“In order to measure our contribution to such sustainable practices, we will collect data through on-farm surveys and censuses supported by third parties, and monitor the number of hectares of farmland with:

- non-plow tillage, direct drilling, and other sustainable cultivation practices*
- crop rotation*
- buffer strips to reduce erosion*
- cover crops*
- rehabilitation of degraded areas”*

(Syngenta, 2014b)

Syngenta trains farmers in soil conservation practices and then profits from the practical implementation of these practices. However it is not clear if it only involves farms that had degraded land before Syngenta’s training, and to what degree can an improvement in soil fertility be traced back to the training. Furthermore, when considering the 10 million hectares of improved farmland, does Syngenta include agricultural areas in which the company’s practices degraded the land, for example when farmers converted their farms to monoculture crops requiring high external inputs? To be consistent, a measurement of goals must include both the negative as well as the positive influence of Syngenta’s initiatives and business practices.

2.3. Help Biodiversity Flourish

Goal 3: “Help biodiversity flourish by enhancing biodiversity on 5 million hectares of farmland.”

2.3.1. Is the Right Goal Defined?

The goal to encourage biodiversity is internationally recognized and is promoted by the Convention on Biological Diversity and the FAO International Seed Treaty. The objective is however not clearly defined. By how much should the biodiversity of crops and agricultural areas be increased?

2.3.2. Actions

a) How Will the Goal be Reached?

“We will help farmers to create diverse, rich habitats through methods ranging from reforestation to buffer strips and diversely-planted field margins.”
(Syngenta, 2014)

A Syngenta case study based on The Good Growth Plan:

Since 2001, Syngenta’s OPERATION POLLINATOR™ has been creating habitats for insects and other wild animals by planting field margins with local wildflower seed mixes across Europe and the U.S., where farms are reporting up to 300 times more bees as a result. In partnership with biodiversity conservation groups, the company is also actively supporting efforts to secure the variety of seeds needed for conserving trees, crop wild relatives, medicinal and other socio-economically valuable plant species for the future.

b) Are These the Right Actions?

It is very important and correct that Syngenta looks beyond the most important crops, and also recognizes the diversity and value of wild relatives and medicinal plants. These plants often possess valuable characteristics (such as drought tolerance or insect resistance) that are being increasingly used in modern breeding. But here too, it must be assessed whether there are factors promoted by Syngenta that diminish agricultural biodiversity. Such a factor could be patents on plants. A statement by the Scientific Committee for Biodiversity and Genetic Resources, of the German Federal Ministry of Food, Agriculture and Consumer Protection, points out that the danger to agricultural biodiversity has diverse causes that may be amplified by patents on plants and animals (Feindt, 2010). Olivier De Schutter,

former U.N. Special Rapporteur on the Right to Food, also identified this link (De Schutter, 2009). Syngenta belongs to those firms that file the most patent applications on plants.

Endangering bee populations through the use of insecticides

For Syngenta, the fostering of bee populations through field margins plays a central role in the preservation of animal diversity. Over a third of agricultural crops rely on pollination, and the preservation of pollinators is critical for our food security. Nonetheless, is the fostering of bee populations through field margins the best way to counteract the global decline of bees? It is important to create new habitats for pollinators, however it is questionable how much sense it makes to set up field margins for pollinators in habitats where highly toxic insecticides are used. In January 2013, the European Food Safety Agency (EFSA) assessed various risks to bees caused by neonicotinoids, a group of highly effective insect control agents. Then in December 2013, despite the strong objections of Syngenta, the E.U. Commission placed tight restrictions on the use of three neonicotinoids for a period of two years. One of the three was Syngenta’s Thiamethoxam, which brought the corporation negative publicity. Syngenta’s criticism of the E.U. Commission’s decision demonstrated the conflict of interest between its core business (the sale of pesticides like Thiamethoxam) and the preservation of biodiversity. But the environmental impact of neonicotinoids goes far beyond just bees. Several studies have shown that various invertebrates are negatively affected by neonicotinoids. A 2014 study showed, for the first time, the influence of neonicotinoids on songbirds. In the Netherlands, the falling population density of various insect-eating birds was correlated with concentrations of neonicotinoids in water samples. Scientists identified the decline of food supplies and the consumption of insecticide-contaminated insects as possible causes (Hallmann et al, 2014).

Preservation of animal diversity

Currently there are no further concrete actions to foster biodiversity. The preservation of animal diversity should be aimed not only at pollinators, but also at all

other animals. Here too, alternative growing systems, that have diverse habitats instead of large-scale monocultures, are recommended. Biological corridors to connect habitats should be established and nurtured. To this end, the value of field margins could be increased with a mixture of native tree species. The trees would serve as protection against wind and erosion, thus increasing the resilience of the system.

2.3.3. How Will Progress be Measured?

“In order to measure our contribution to biodiversity, we will collect data through on-farm surveys and censuses supported by third parties. The number of hectares of farmland will be monitored for:

- multifunctional field margins*
- species protection areas*
- new diverse habitats*
- reforestation*
- overall number of species protection programs”*

(Syngenta, 2014b)

The exact actions must be made transparent, so that the fostering of biodiversity across five million hectares of farmland can be attributed to Syngenta. However it is not Syngenta’s job to reforest areas or to set up species protection programs. The causes, and not the symptoms, should be addressed. Syngenta should undertake actions to prevent the direct negative effects to biodiversity caused by its products and the agricultural systems it promotes. To enhance five million hectares of farmland is a drop in the ocean if Syngenta does not simultaneously reduce the negative effects of its activities and products. The company’s core business benefits the most from large-scale monocultures and its numerous products that are harmful to biodiversity.

It would therefore be necessary, for example, to evaluate the number of Syngenta products that are toxic to bees, as well as the sales figures of those products.

2.4. Empower Smallholders

Goal 4: “Empower smallholders by reaching 20 million smallholders and enabling them to increase productivity by 50 percent.”

2.4.1. Is the Right Goal Defined?

This goal also focuses on increasing productivity. However higher productivity by itself cannot be equated with less hunger and poverty. The critical factor is not how much a farmer produces, but whether he or she can earn a living wage. This indicator is also cited by the FAO’s SAFA system (as net income). According to the FAO, other important economic factors include the stability of crop yields or – particularly interesting in the case of Syngenta – the dependence on individual input suppliers (FAO, 2013a). Potentially higher yields, which due to higher production costs lead to greater debts, can result in disaster. When higher production costs are combined with lower crop prices, farmers are caught in a vicious cycle – a technological treadmill – that makes an escape from poverty impossible (see Illustration 3).

2.4.2. Actions

a) How Will the Goal be Reached?

“By providing tools and training that make agriculture more productive, efficient and profitable. Partnering with organizations such as USAID, we can bring farmers the products and know-how to raise productivity by 50 percent while preserving the long-term potential of their land. We will also help them finance higher-yielding products and enable them to reach markets to sell their crops.”

(Syngenta, 2014)

A Syngenta case study based on The Good Growth Plan:

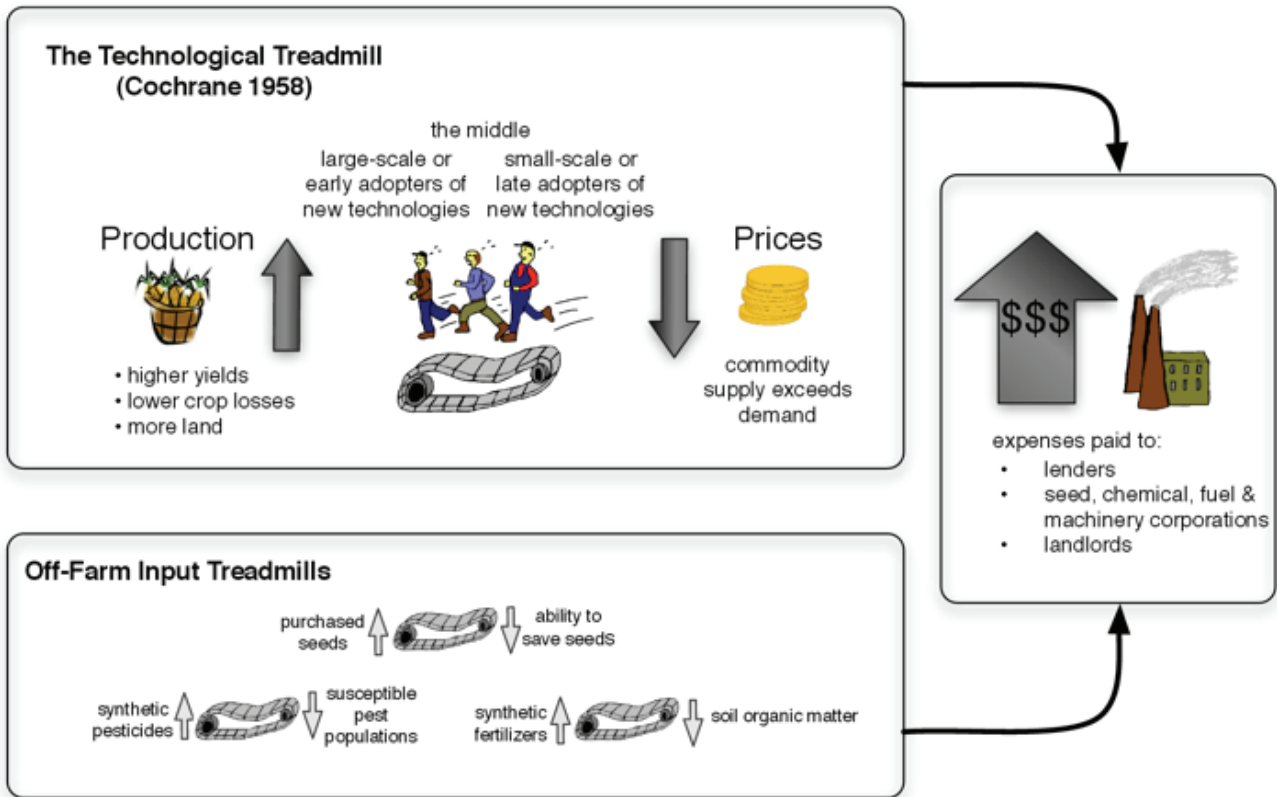
Syngenta supports the SAGCOT initiative (The Southern Agricultural Growth Corridor of Tanzania), a public-private partnership whose aim it is to establish a growth corridor from Dar es Salaam, on the coast, through Tanzania into neighboring countries Malawi, Zambia, and the Democratic Republic of Congo. Syn-

genta works in the region with fertilizer company Yara and local universities to improve local rice and corn growing practices through new technologies and techniques. Initial results show that productivity can be doubled and profit can be increased by 75%.

b) Are These the Right Actions?

Making agriculture “more productive, efficient and profitable” means that the smallholders should use Syngenta’s products and technologies. If Syngenta wants to help them “finance higher-yielding products,” it means that money is loaned to farmers so they can afford to purchase Syngenta’s products. Using new technologies and products can however lead to farmer dependency on Syngenta. The technologies are also more costly and therefore more risky. An alternative would be to strengthen traditional functioning agricultural systems that are based on locally-adapted varieties.

Syngenta mentions the SAGCOT initiative as a functioning example. The company emphasizes the potential for increased productivity for the farmers along the above-mentioned corridor in East Africa through use of its technologies and products. This will promote intensified agriculture, and the end products will be brought to the international market. Syngenta suggests that the focus is on smallholders. In reality, farmers will be pushed into the role of contract farmers, having to cover their own risks while firms dictate production and delivery terms to them. Furthermore, many smallholders have no legal title to their land. Thus, land confiscation along the SAGCOT will increase poverty and drive the farmers into the hands of the powerful corporations. A report by Helena Paul and Ricarda Steinbrecher (Paul & Steinbrecher, 2014) warns that agricultural knowledge, traditional growing systems such as shifting cultivation, and locally-adapted varieties, could thus be driven out, to the benefit of intensive and industrial growing systems that use hybrid varieties and genetically modified seed.



Grafik 3: Agricultural Treadmills; Quelle: Howard, 2009

2.4.3. How Will Progress be Measured?

“We will measure the number of smallholders reached by a combination of estimating sales of specially-designed products and packs for smallholder farmers, as well as reviewing projects and initiatives that are developed specifically to reach smallholder farmers. These include training, market access, financial solutions and mobile-phone based solutions. We will share our information and processes with third party auditors and our partners for verification.”
 (Syngenta, 2014)

The number of farmers reached will be reported. More important would be to determine if the productivity of the farmers has permanently risen by 50% thanks to Syngenta’s solutions. Furthermore, it must be investigated if the farmers generate more income also in the mid- and long-term, in order to improve their living standard, or if it is only a short-term increase in production with increased production costs as well. The chosen criteria seem to point to a rather superficial evaluation that insufficiently considers the everyday reality of farmers.

In the interests of transparency, it is necessary to know who the external auditors are and how their neutrality will be guaranteed. The data and processes should be made public so they can be independently examined.

2.5. Help People Stay Safe

Goal 5: “Help people stay safe by training 20 million farm workers on labor safety, especially in developing countries.”

2.5.1. Is the Right Goal Defined?

The training of farm workers on the risks and dangers of pesticides, as well as proper and safe usage practices, is important. However it is not clear what percentage of the workers that use Syngenta products will be reached by the training of 20 million farm workers. In addition, training is not enough to prevent the risks of dealing with pesticides. Further goals must be defined in order to permanently improve safety (see 2.5.2b).

2.5.2. Actions

a) How Will the Goal be Reached?

“We aim to raise awareness of the risks associated with agricultural work, and share knowledge of how these can be effectively managed and prevented. Each year we train as many farmers as possible through partnerships with local organizations and product retailers. To reach 20 million farm workers by 2020, we will partner with even more organizations. Training will be done by Syngenta staff or partners. We will ensure that training is high-quality and leads to measurable impacts on attitudes, knowledge and behaviors.”

(Syngenta, 2014)

A Syngenta case study based on The Good Growth Plan:

In China, Syngenta works together with the Ministry of Agriculture in a program that since 2000 has trained farmers on safe and effective use of pesticides. In 2012 alone, Syngenta and local partners facilitated over 8,500 farmer meetings attended by almost 260,000 farmers.

b) Are These the Right Actions?

According to the FAO’s International Code of Conduct on the Distribution and Use of Pesticides (FAO 2010), the training of farm workers is the third of three measures that should be taken to reduce risk. The first measure is to avoid pesticides where possible. The second measure calls for less hazardous pesticides to be used. The training of farm workers is the third measure recommended by the FAO: “The impact of training in proper pesticide use continues to be questioned and

cannot be regarded as a solution for risks associated with the use of highly hazardous products, particularly in developing countries where large numbers of small-scale farmers would have access to these products” (FAO, 2010). Therefore the sole action recommended by Syngenta cannot be regarded as an effective solution.

Even Syngenta has recognized in the meantime that training does not necessarily influence the safety of workers, because often what was learned is not later applied (Syngenta, 2013b). Therefore the company wants to use new systems to monitor the effectiveness of training, and to identify any causes that prevent a behavioral change in workers. The FAO states that the knowledge gained during a training is often not applied afterwards because the workers have no access to protective clothing, or they cannot afford it, or because wearing protective clothing in warm and humid climates is unacceptable. In addition, it is impossible to train all workers, just as it is impossible to limit the use of pesticides to only those workers who have been trained (FAO, 2010). When dealing with highly toxic pesticides, this is negligent. According to a study by PAN Germany, Syngenta sells 65 pesticides in Africa, Asia and Latin America that, according to the PAN International List of Highly Hazardous Pesticides, are classified as highly hazardous. Some of them are banned in Switzerland and other industrialized countries (PAN Germany, 2012).

In order to improve worker safety, highly hazardous pesticides like Paraquat would have to be removed from the global market. But such a measure would clearly be a conflict of interest for Syngenta’s core business.

Syngenta’s worker safety program ignores the most effective methods for improving safety. The company does not want to sell less pesticide, nor does it want to replace its most hazardous pesticides. With its refusal to remove highly hazardous products from the market – a move that even the FAO calls for – Syngenta becomes jointly responsible for the high health risks that countless farmers and farm workers are exposed to. A legal opinion commissioned by the Berne Declaration showed that Syngenta violates elementary human rights because of its sale of Paraquat in developing countries (Grabosch, 2011).

2.5.3. How Will Progress be Measured?

“We will measure the absolute number of people trained which will be externally verified by our auditors. But this is not just a numbers game. No matter how many people we train in safe agricultural practices, training alone does not guarantee a tangible impact on safety. So we are designing and implementing new monitoring systems that track the effectiveness and impacts of labor safety training programs, and identify bottlenecks that prevent behavioral change.”

(Syngenta, 2014)

“We have established key performance indicators including:

- investment in training*
- number of trainings conducted*
- adoption of occupational safety and health practices by the farmer*
- number of reported accidents and health incidents”*

(Syngenta, 2014b)

It is good that Syngenta measures not only how many farmers attended the company’s training courses – since this tells nothing about the effectiveness of the courses – but also if the occupational safety and health practices that were presented are appropriately applied afterwards. Here one might ask: How will Syngenta check this? Inspections should take place unannounced. Prior knowledge of an inspection runs the risk that workers will follow required practices and wear protective clothing that they otherwise would not do. In addition, Syngenta makes no statement about what percentage of users of its products attend a training course. It is likely that 20 million is a fraction of all users. This puts in perspective the statement about the effectiveness of Syngenta’s safety programs.

2.6. Look After Every Worker

Goal 6: “Look after every worker by striving for fair labor conditions throughout our entire supply chain network.”

2.6.1. Is the Right Goal Defined?

It is commendable that labor conditions should be fair throughout the entire supply chain. However this goal is vaguer than all the others, and not measurable in its present form. “Striving for” fair labor conditions describes a process and not a concrete goal. No milestones or steps are defined.

2.6.2. Actions

a) How Will the Goal be Reached

“We have strict contractual requirements – prohibiting the use of child labor, for example. We also encourage suppliers to meet our standards through intensive training and financial incentives. In 2004, we began working with the Fair Labor Association (FLA) to address labor standards on seed farms in India, including child labor, health and safety, awareness of workers’ rights, wages and benefits, hours of work, harassment, abuse and discrimination. We have since expended this program to Eastern Europe and Latin America: it now includes 22,895 suppliers.”
(Syngenta, 2014)

A Syngenta case study based on The Good Growth Plan:

Tem Que Ser Legal (Rural Work Must Be Fair) was launched by Syngenta in cooperation with the FLA, and shows the company’s commitment to adhering to labor standards. The initiative is viewed by the government and unions as a benchmark for the agricultural sector.

b) Are They the Right Actions

It is unclear how comprehensive Syngenta’s list of suppliers is. The company indicates 22,895 suppliers in the program, but the total number of its suppliers is unknown. In addition, the program is limited to India, Eastern Europe and Latin America. Does Syngenta have no suppliers in Asia (other than India) or Africa to be monitored?

Regarding the Fair Labor Association (FLA), the main partner for the program’s realization, the following

should be noted: The FLA is a multi-stakeholder initiative, with members from companies, NGOs and universities. Labor unions are not represented. The FLA has a code of conduct that participating companies must implement in their supply chains. Some of the code’s phrasing is either not exact enough, or else contradicts ILO conventions. For example, according to the FLA code of conduct, and contrary to the ILO standard, it is possible, under exceptional business circumstances, that employees may be required to work more than 60 hours per week (48 regular hours and 12 overtime hours). The right to a living wage (which in most cases far exceeds the legal minimum wage) is very vague in the code of conduct and is not formulated as a binding requirement.

Furthermore, the FLA makes no reference to: the Universal Declaration of Human Rights, the U.N. Convention on the Rights of the Child, or the U.N. Convention on the Elimination of All Forms of Discrimination Against Women. Similarly, there are no effective instruments to investigate systemic causes of labor and human rights violations, for the purposes of correction and transparency (for example within the context of a modified procurement policy of a member company).

2.6.2. How Will Progress be Measured?

“Our programs will be independently verified by the FLA using an agreed risk-based approach. Our procurement and supply chain professionals will work with suppliers to continuously improve their labor practices, and we will monitor and report on progress.”
(Syngenta, 2014)

Annually, less than 4% of all suppliers are verified for implementation of the FLA standard (Starmanns, 2011). Only 43 verification reports involving Syngenta can currently be found on the FLA website, all of which document various violations of the code of conduct. On this basis, it is difficult to imagine how total compliance with the code of conduct can be guaranteed for over 20,000 suppliers. The labor and human

rights violations are depicted as individual, isolated cases. Here too it is important to analyze systemic causes of labor and human rights violations. Decisions that are made in the headquarters of a purchasing or contracting company often have direct consequences – including labor and human rights violations – for workers in the supply chain.

How and if Syngenta does this root cause analysis, and what conclusions it draws, is unknown. In recent years the FLA has come under increasing criticism as a verification organization (New York Times, 2012),

and its independence has been questioned, since it is largely financed by the firms it verifies. This suggests a conflict of interest: After Apple became a paying member of the FLA, the CEO of the FLA, Aret van Heerden, described the working conditions at Apple supplier Foxconn as “very good” in comparison with other Chinese factories. Van Heerden was criticized for the remark because it followed reports in the news of several Foxconn employees committing suicide, and of work weeks at Foxconn that sometimes exceed 70 hours (New York Times, 2012).

3. Conclusions

With The Good Growth Plan, a six-point plan for responsible growth, Syngenta introduces a process that even by the complete achievement of its objectives will not produce a sustainable and responsible business. This is primarily because the stated goals, actions and indicators are insufficient to comprehensively observe due diligence and to protect human rights. Fundamental questions about its product line and corporate policy are not answered.

A paradigm shift in agriculture, called for by (among others) the widely supported IAASTD, is not endorsed by Syngenta and its Good Growth Plan.

The Good Growth Plan is flawed, particularly because possible negative effects of corporate policy will be ignored due to the specific choice of indicators. Syngenta is not interested in knowing if highly hazardous pesticides continue to be sold to farmers that cannot properly protect themselves, or if water becomes contaminated by pesticides, or if smallholders earn enough to lead decent lives.

Syngenta highlights its contribution to feeding the world. In our opinion, the firm is primarily responsible for its products and their effects. A central pillar of responsible corporate policy is the implementation of

the U.N. Guiding Principles on Business and Human Rights. Syngenta has so far refrained from doing so. The problems that Syngenta must solve involve its core business: the consequences of its highly hazardous pesticides on people and the environment, and the problems caused by the industrialization of agriculture based on the use of genetically modified seeds.

Syngenta addresses these core issues insufficiently – if at all – with its Good Growth Plan. Nonetheless it invests large sums on the plan to present itself as a responsible corporation. Our analysis shows that The Good Growth Plan is primarily a public relations campaign, and not an effort by Syngenta to assume responsibility for the damage it causes.

4. Bibliography

BASF (2011). AgBalance™ – A clearer view of agricultural sustainability.

http://www.basf.com/group/corporate/en_GB/function/conversions:/publish/content/sustainability/eco-efficiency-analysis/images/AgBalance_Brochure_2011.pdf (Stand 02.09.2014).

Benbrook, Charles M. (2012). Impacts of genetically engineered crops on pesticide use in the U.S. – the first sixteen years. *Environmental Sciences Europe* 2012, 24: 24.

<http://www.enveurope.com/content/pdf/2190-4715-24-24.pdf> (Stand 02.09.2014).

Cochrane, Willard W. (1958). *Farm Prices: Myth and Reality*. Minneapolis: University of Minnesota Press.

De Schutter, Olivier (2009). The right to food. Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation.

http://www.srfood.org/images/stories/pdf/officialreports/20091021_report-ga64_seed-policies-and-the-right-to-food_en.pdf (Stand 02.09.2014).

EC (2011). European Commission. Sustainable food consumption and production in a resource-constrained world – The 3rd SCAR Foresight Exercise. Publications Office of the European Union: Luxembourg.

<http://ec.europa.eu/research/agriculture/conference/pdf/feg3-report-web-version.pdf> (Stand 03.09.2014).

FAO (2013). *The State of Food and Agriculture. Food Systems for better Nutrition*. Rome.

<http://www.fao.org/docrep/018/i3300e/i3300e00.htm> (Stand 03.09.2014).

FAO (2013a). *Safa indicators – Sustainability assessment of food and agriculture systems: Indicators*. Rome.

http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/SAFA_Indicators_final_19122013.pdf (Stand 03.09.2014).

FAO (2011a). *Global food losses and food waste – Extent, causes and prevention*. Rome.

FAO (2011b). *Save and grow. A policymaker's guide to the sustainable intensification of smallholder crop production*. Rome.

FAO (2010). *International Code of Conduct on the Distribution and Use of Pesticides. Guidance on Pest and Pesticide Management Policy Development*.

http://www.who.int/whopes/recommendations/FAO_WHO_Guidelines_Pesticide_Advertising.pdf (Stand 03.09.2014).

FAO (1994). *Land degradation in south Asia: Its severity, causes and effects upon the people, Chapter 6*. Rome.

<http://www.fao.org/docrep/v4360e/v4360e00.HTM> (Stand 03.09.2014).

Feindt, Peter H. (2010). *Biopatente – eine Gefährdung für Nutzung und Erhaltung der Agrobiodiversität? Stellungnahme des Beirats für Biodiversität und genetische Ressourcen beim Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz*. Bonn.

http://www.bmelv.de/SharedDocs/Downloads/Landwirtschaft/Tier/TierzuchtTierhaltung/Gutachten-Biopatente.pdf?__blob=publicationFile (Stand 03.09.2014).

Grabosch, Robert (2011). The Distribution of Paraquat: Does Syngenta Respect Human Rights? Erklärung von Bern.

http://www.evb.ch/fileadmin/files/documents/Syngenta/Paraquat/2011_Paraquat_Distribution_Legal_Opinion.pdf (Stand 03.09.2014).

Hallmann, C.A., Foppen, R.P.B., van Turnhout, C.A M., de Kroon, H., Jongejans, E. (2014). Declines in insectivorous birds are associated with high neonicotinoid concentrations. In: Nature 511: 341–343.

Hartman, Glen L., West, Ellen D., Herman, Theresa K. (2011). Crops that feed the World 2. Soybean – worldwide production, use, and constraints caused by pathogens and pests. Food Sec. 3: 5–17.

http://www.unicentroagronomia.com/imagens/noticias/artigo_4_ingles.pdf (Stand 03.09.2014).

Howard, Philip H. (2009). Visualizing Consolidation in the Global Seed Industry: 1996–2008. Sustainability 1(4): 1266–1287.

<http://www.mdpi.com/2071-1050/1/4/1266> (Stand 03.09.2014)

IAASTD (2009). Global Report. Agriculture at a Crossroads.

Monsanto (2013). Monsanto's 2012 Sustainability Report.

<http://monsantoblog.com/2013/06/20/monsantos-2012-sustainability-report/> (Stand 03.09.2014)

PAN Germany (2012). Hochgefährliche Pestizide von BASF, Bayer und Syngenta! Ergebnisse einer internationalen Recherche. Eine gesunde Welt für alle. Mensch und Umwelt vor Pestiziden schützen, Alternativen fördern.

http://www.pan-germany.org/download/Big3_DE.pdf (Stand 03.09.2014).

Paul, Helena, Steinbrecher, Ricarda (2013). African Agricultural Growth Corridors and the New Alliance for Food Security and Nutrition. Who benefits, who loses?

<http://www.econexus.info/publication/african-agricultural-growth-corridors-and-new-alliance-food-security-and-nutrition-who-b>

(Stand 02.09.2014)

Ranum, P., Peña-Rosas, J.P., Garcia-Casal, M.N. (2014). Global maize production, utilization, and consumption. Annals of the New York Academy of Sciences. Vol 1312: 105–112.

Starmanns (2011). Standards, Multistakeholder- und Business-Initiativen. Vortrag gehalten von Mark Starmanns am 17.11.2011 im Rahmen des Swiss Fair Trade Forum 2011 an der Universität Zürich. Power Point Präsentation:

<http://46.182.18.248/Starmanns.pdf>

Syngenta (2013). The Agricultural Disconnect – Global Research Report.

<http://www.syngenta.com/global/corporate/SiteCollectionDocuments/pdf/publications/good-growth-plan/agricultural-disconnect.pdf> (Stand 03.09.2014)

Syngenta (2013a). Syngenta Pressemitteilung, 13. Juli 2013.

<http://www.syngenta.com/country/us/en/agriculture/seeds/corn/enogen/Pages/DonationNewsRelease.aspx> (Stand 03.09.2014)

Syngenta (2013b). Website des Good Growth Plan.

<http://www.syngenta.com/global/corporate/en/goodgrowthplan/home/Pages/homepage.aspx>

Syngenta (2014). Annual Report 2013.

http://www.annualreport.syngenta.com/assets/pdf/Syngenta_Jahresbericht_2013.pdf (Stand 03.09.2014)

Syngenta (2014a). The Good Growth Plan. Eine Welt. Sechs Verpflichtungen. Basel.

<http://asp-gb.secure-zone.net/v2/index.jsp?id=1134/3360/8729&startPage=4> (Stand 03.09.2014)

Syngenta (2014b) Handout «The Good Growth Plan»

http://www.lid.ch/fileadmin/user_upload/lid/Pressecorner/2014/20140117_AMS_2a_HandoutSyngenta.pdf

(Stand 03.09.2014)

The New York Times (2012). Early Praise in Inspection at Foxconn Brings Doubt.

New York Times, 16.02.2012.

http://www.nytimes.com/2012/02/17/business/early-praise-in-foxconn-inspection-brings-doubt.html?_r=1&

(Stand 03.09.2014)

UNEP (2009), Nellemann, C., MacDevette, M., Manders, T., Eickhout, B., Svihus, B., Prins, A.G., Kaltenborn, B.P. (2009). The environmental food crisis – The environment’s role in averting future food crises. A UNEP rapid response assessment. United Nations Environment Programme, GRID-Arendal.

United Nations General Assembly (2010). Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter. Human Rights Council, Sixteenth session, Agenda item 3, Promotion and protection of all human rights, civil political, economic, social and cultural rights, including the right to development.

<http://www2.ohchr.org/english/issues/food/docs/A-HRC-16-49.pdf> (Stand 03.09.2014)

UNCTAD (2013). Trade and Environment Review 2013 – Wake up before it is too late. Make agriculture truly sustainable now for food security in a changing climate.

<http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=666> (Stand 03.09.2014)

USDA (2014). U.S. domestic corn use – Economic Research Service.

<http://www.ers.usda.gov/media/866543/cornusetable.html> (Stand 03.09.2014)

Wezel, A., Bellon, S., Doré, T., Francis, C., Vallod, D., David, C. (2009). Agroecology as a science, a movement and a practice. A review.

<http://agroeco.org/socla/wp-content/uploads/2013/12/wezel-agroecology.pdf> (Stand 03.09.2014)

Zimmatic (2010). Improving biofuel ROI through efficient irrigation solutions – higher Yields ... lower Costs ... Precision application.

<http://www.zimmatic.com/stuff/contentmgr/files/0/0779a147db26d855c19273f25225d426/pdf/biofuels.pdf>

(Stand 03.09.2014)

