Progress report 2015/2016 Bionade GmbH

on the Leadership Declaration of the 'Biodiversity in Good Company' Initiative

Biodiversity is the foundation of our life and human well-being. It is an essential requirement for healthy ecosystems which in turn provide us with the vital ecosystem provisions of oxygen and water, raw materials, fuel, fibres for clothing, food, active ingredients for medication, and much more. Biodiversity of the entire organisational hierarchy – genetic diversity within each species, diversity of species within the ecosystem and the diversity of ecosystems themselves – are the key to efficient ecosystems in which the greater the diversity, the more stable is the system. However, what we have been observing is a considerable and rapidly advancing loss of biodiversity, caused by humans, leading to the degradation of ecosystems and the negative consequences of which are already a reality in many regions, e.g. the impact on climate change.

Biodiversity management is therefore of fundamental corporate interest and companies can make a considerable contribution. As a producer of beverages, Bionade is in an industry in which, by processing agricultural raw materials and water, it has a direct influence on the natural environment and biodiversity. Therefore, Bionade sees biodiversity management as being of existential importance and recognises its relevance for the company's core business. Bionade therefore supports the biodiversity targets of the United Nations and, as a member of the 'Biodiversity in Good Company' e.V. initiative is bound by the initiative's leadership declaration.

The Leadership Declaration:
All signatory companies acknowledge and support the three objectives of the international "Convention on Biological diversity":

- Conservation of biological diversity
- Sustainable use of its components
- Fair and equitable sharing of the benefits that arise out of the utilisation of genetic resources

and commit themselves to:
1. Analysing corporate activities with regard to their impacts on biological diversity;
2. Including the protection of biological diversity within their environmental management system;
3. Appointing a responsible individual within the company to steer all activities in the biodiversity sector and report to the Management Board;
4. Defining realistic, measurable objectives that are monitored and adjusted every two to three years;
5. Publishing activities and achievements in the biodiversity sector in the company's annual, environmental and/or corporate social responsibility report;
6. Informing suppliers about the company's biodiversity objectives and integrating suppliers accordingly and step by step;
7. Exploring the potential for cooperation with scientific institutions, non-governmental organisations (NGOs) and/or governmental institutions with the aim of deepening dialogue and continuously improving the corporate management system vis-à-vis the biodiversity domain.

To demonstrate ongoing commitment, member companies will provide the Initiative with a progress report every two years.

1. Analysis of the impact of the company's activities on biodiversity

Since 2012, Bionade GmbH has been studying the impact of its decisions on ecosystems. The touch points between the business activities of Bionade GmbH and the natural environment have been recorded in a systematic company-wide biodiversity analysis, which analyses and evaluates the influence on biological diversity. Five spheres of activity were derived from this which are systematically being worked on to improve the biodiversity performance of the company. All existing initiatives have been and will be checked for aspects of biodiversity and improved. Bionade has launched a number of projects to promote biodiversity, mainly in the supply chain management and site management areas. This includes biodiversity audits along the supply chains, the "Bionade Bee" project, the "Bionade Company Garden" project, the "River Streu Patronage" in Ostheim and the collaborative project with the partner Trinkwasserwald e.V.®, which has been in operation since 2008.

Focus: Biodiversity management in the supply chain

Bionade took the decision to use only raw materials from 100% organic farming for production a number of years ago. This fact alone has an enormously positive influence on biodiversity, since no synthetic chemical fertilisers, pesticides or genetically modified organisms are used. The raw materials specifications and strict supplier selection criteria, which also contain biodiversity issues, further set the course towards the promotion and maintenance of biodiversity. In so doing, Bionade not only concentrates on the directly controllable area of influence in the tier 1 suppliers, but opts for a holistic approach right down to the raw material growers. The supplier code binds companies along the entire supply chain to Bionade's standards. Because of the very good cooperation with tier 1 suppliers, it was also possible to delineate in full transparency the important raw material supply chains and to audit individual key companies along the supply chain with regards to their biodiversity performance.

Biodiversity audit

Based on a pilot project on behalf of the Deutsche Gesellschaft für internationale Zusammenarbeit GmbH (German association for international cooperation – GIZ) in 2012 in Mexico, where the cultivation and processing operations of organic ginger was being audited, the implementation of biodiversity audits was established along the supply chains right down to the producing areas of Bionade raw materials. The originally applied methods of biologist Dr. Derek Whatling were thus further developed and adapted to the needs of Bionade GmbH. With the help of this process, checks are made on the influence of businesses on biodiversity to highlight the risks and opportunities for both the environment and for the company. The centrepiece of Dr. Whatling's research method is a biodiversity audit based on established environmental and biodiversity evaluation methods. This biodiversity audit was embedded in a process which is tailored to the requirements of Bionade GmbH, "Biodiversity Management in the Supply Chain" (BMIL). Two main objectives are pursued here: Transparently breaking down supply chains and upgrading the biodiversity status of the businesses and identifying risks and opportunities which arise from this.

In December 2015, comprehensive biodiversity audits for lemon, bergamot and blood orange were carried out in southern Italy (Sicily and Calabria). Objective of the biodiversity audits was the assessment of farms and processing facilities for lemons, bergamots and blood oranges regarding their interaction with the natural environment and the impact on biodiversity. The audits were run by a qualified biodiversity expert who applies 67 criteria for the assessment. Observations during a site visit, the inspection of the adjacent landscape as

well as on site interviews feed the criteria list. Topics covered by the audit are for example legal aspects of environmental management, biodiversity related geographical context, landscape positioning, cultural aspects and local aspects like water courses and natural features, species within context or surroundings, connectivity and habitat types and condition. The results were as positive as they could be and largely opened up additional opportunities. It was impressive to see the open-minded and positive reactions of the businesses being audited; they very much welcomed the commitment and initiative towards biodiversity and the interest in and appreciation of the local work. The support for the preparation and implementation of the audit was outstanding along the entire supply chain.

Comprehensive project work

The concluding meeting of the "Companies Promote Diversity" project took place at the end of 2016; it had been run by the Institute for Environmental Planning at Leibniz University in Hanover in cooperation with the Association of Organic Good Producers (AöL), the Working Group on Organic Agriculture (AGÖL) and the Lower Saxony Chamber of Agriculture. The project, which started in 2014, was supported by Bionade, HiPP, Märkisches Landbrot and Neumarkter Lammsbräu, member companies of the AöL. The objective of the "Companies Promote Diversity" project, promoted by the German Federal Environmental Foundation (DBU), was to put the farm management software MANUELA (Its initials in German standing for Nature Conservation Management System for Sustainable Agriculture) into practice. The MANUELA software records and evaluates nature conservation performance of farms on an operational level and derives measures from this. Indicators relevant to biodiversity will be used to determine what a transparent, credible and yet workable measurement of the biodiversity performance of suppliers might look and how this biodiversity information can be used by food-producing companies. Note: At the time of writing this progress report, the project's concluding report was still being drafted.

Focus: Ostheim v.d. Rhön site

Bionade production premises and "Company Garden"

The Bionade GmbH premises in Ostheim lies within the Rhön Biosphere Reserve and, in addition to built up and enclosed operational areas, also has garden areas and natural spaces. As part of our commitment to protecting natural diversity, it was therefore obvious that we should create more biodiversity in our own space. In cooperation with the Institute for Environmental Planning at Leibniz University in Hanover, the entire site was mapped in 2010. This made it clear that these natural spaces in particular are attributed increased significance with regard to biodiversity. Since then, work is being done to transform and upgrade the spaces, with specialist support from the regional conservation experts at the Landesbund für Vogelschutz (Federal association for the protection of birds – LBV). In 2015, the Bionade garden area was further designed, also with the voluntary support of some employees. To enable native species to settle, special attention was given to creating refuges for breeding and nesting spaces for small animals, insects and birds. It was also important to ensure that there is sufficient food provision for all animals and particularly for the resident bees on the premises. Existing trees such as wild plum and willow have been properly pruned, new fruit trees and blackthorn have been planted and also a wild hedgerow and a deadwood hedge have been put in place. A dry-stone wall, installation of bat and owl boxes, insect hotels and perches for birds of prey also contribute towards the biodiversity-friendly design of the site.
The first positive changes can already be witnessed and experienced in practice by the employees in the colonisation of the orchard meadows and the two insect hotels.

Bionade Bee Project

The history of Bionade is closely connected with the bee, which is why promoting and safeguarding the survival of bees is a core concern of the company. The ingenious natural model of gluconic acid, which bees obtain from fructose to "preserve" their honey was the key to developing Bionade. The organic soft drink is naturally produced using an elaborate fermentation process and brewed in a manner similar to beer from water and malt according to a purity law. The fact that no alcohol is produced is thanks to an enzyme called glucose oxidase which transforms a part of the sugar into gluconic acid, a mild, organic substance. This provides the unmistakeable taste of Bionade.

Against this backdrop, the "Bionade Bee" initiative was founded at the Bionade site in early 2014. Developed by a core team, it was maintained through its first bee year with the help of local bee mentors. A total of three bee colonies are now being kept in accordance with the method known as species-appropriate beekeeping. This means, for example, that bees keep a portion of their honey as a source of food for overwintering and are allowed to swarm – as nature intended. The pilot phase lasting until 2015 was successfully completed. Three bee colonies now live amongst the quince and orchard meadows in the Bionade gardens and are looked after by a core team of employees. The goal of the project is to raise awareness among employees of the challenges facing the modern honey bee; this means not only explaining the need to protect the bee but also highlighting specific options for protection. Honey production as such plays a secondary role in this project. Only a certain proportion of the honey produced is taken from the bees. The Bionade bees are also used as part of special events, e.g. environmental education for visiting school children, as they are a perfect example for demonstrating how an ecosystem is made up of a strong network of complex interconnections. At the same time, it shows that EACH of us can do something for the bees. There are also tips on references to information and recommendations for bee-friendly plants, herbs and flowers, also flowers for agricultural perimeter areas, for choosing appropriate city trees and last but not least bee-friendly recommendations for forest owners.

2. Adoption of biodiversity conservation into the environmental management system

Maintaining biodiversity has been part of the company's certified environmental management system ever since it was established in 2011. Biodiversity thus became and remains embedded in Bionade GmbH's integrated management system. Specific biodiversity aspects were incorporated into existing management systems on the basis of corresponding GRI indicators. These biodiversity criteria, EN14 and the question whether the supplier is interested in generating specific areas for the protection of biodiversity, are now also part of the selection criteria for suppliers. The aim was to ensure that the cross-sectional role of biodiversity was taken into account and that biodiversity aspects were considered. The indicator "Biodiversity Protection Strategies" (EN14) is therefore recorded in supplier documentation and is updated continuously.

3. Coordination of all biodiversity activities and reporting to the management via a responsible individual within the company

Activities relating to biodiversity and the structuring of biodiversity management are overseen and coordinated by the Sustainable Development department. This department reports to the company's management.

4. Measurable and realistic objectives for improved protection of biodiversity and its sustainable use with a two to three year review and adjustment

Comprehensive projects
The flora and fauna measurements undertaken for the “Companies Promote Diversity” research project will continue to be tested with a Bionade contract farmer from the Rhön organic farming[1] initiative in order to examine the opportunities offered by this programme for improving nature conservation provision in local farming. The project was completed in 2016. See also point 1.

Biodiversity audit
Further biodiversity audits are planned for the raw materials supply chain in accordance with a priority key (see new flavour Blackcurrant-Rosemary for 2017). Using a rotation system, site inspections are also being carried out at suppliers' businesses which, amongst other things, investigate and document the implementation of measures promoting biodiversity based on the previously carried out biodiversity audit.

Cooperation, dialogue boards
Established and initiated cooperation covering a range of topics on water conservation and raising awareness of biodiversity (see amongst others the River Streu Patronage in cooperation with the Landschaftspflegeverband Rhön-Grabfeld e.V. (LPV) are being continuously pursued.

5. Publication of all biodiversity activities and findings in the annual, environmental or sustainability report

Among other locations, Bionade published its biodiversity activities and achievements in the first Bionade sustainability report, which was issued in December 2014. The company's second report has the subject of biodiversity as its main focus. The second Bionade sustainability report was published in December 2016. Both reports can be downloaded as a PDF from the Bionade website: http://www.bionade. de/en/our-statement/. It can also be ordered online as a file copy.

[1] *In 2005, Bionade launched a regional raw materials farming project in cooperation with farmers under the title of Rhön Organic Farming. The project began with the cultivation of elderberry, which grew only wild in the Rhön region at that time. A cooperation developed between Bionade and the farmers which guaranteed the long-term supply of key agricultural raw materials such as organic elderberry from the Rhön Region. By concluding long-term contracts, the company was able to help local farmers to switch to organic farming, thus offering new prospects in the Rhön Region. Every farming partner is a member of one of the German organic farming associations. This guarantees that the raw materials are farmed according to significantly stricter organic criteria than, for example, the EU organic standards.*

6. Supplier information regarding biodiversity goals and gradual integration

By incorporating biodiversity aspects into the existing integrated management system and taking biodiversity aspects into account in both supplier self-assessment and the supplier selection process, as well as the binding supplier code, Bionade is promoting awareness of the importance of and specific strategies for biodiversity protection among suppliers.

Above all, the BMIL assessment method adapted to Bionade requirements (see point 1) has identified opportunities where a biodiversity management approach with respect to suppliers can be placed. The most intensive dialogue with the suppliers will be conducted as part of the specific audit.
In addition to this, all main raw material suppliers receive regular information, both verbally and in writing. In 2015, a specific industry event took place for the contract farmers.
As part of this dialogue, suppliers also provide specific and relevant input and information which has a positive effect on the company's development.

7. Collaborations with potential partners such as nature conservation organisations, scientific or state institutions to deepen expertise through dialogue and develop the management system

Collaborations with competent partners and establishments have proven very valuable, as the complexity of the topic of biodiversity is such that interdisciplinary work and the necessary expertise is essential in a company context.

One of these collaborations was in the context of water's role in the ecosystem. Since 2008, Bionade in cooperation with the association **Trinkwasserwald e.V.®** has transformed a total of 74 hectares, the equivalent of more than 200,000 trees, of single-species coniferous forests in Germany into mixed forests. Using a scientifically recognised procedure, coniferous forests are transformed first into mixed forests and then into purely deciduous forests through undergrowth planting. Thanks to these "leafy forests", as well as offsetting all of the drinking water required for annual bottling, Bionade is also sustainably generating additional groundwater and drinking water. A mixed forest absorbs an average of 80 litres more per square metre a year than a coniferous forest. As well as generating groundwater, the forest conversions mean a significant increase in the biodiversity of these areas. Whilst coniferous forests are home to around 120 species, deciduous forests on the other hand offer a home to around 7,000 species in the forest ecosystem. In 2015 and 2016, the company converted approximately 6.4 hectares and, in so doing, planted around 26,000 trees with their partner. In 2017, further planting is planned, also in the Rhön Region. This makes Bionade the first German company to be a major player in the field of sustainable water protection and in the increase of the suppply of drinking water.

Bionade has been a partner of the Rhön Biosphere Reserve, the Rhön Nature Park and RhönNatur e.V. since 2005. Joint events on the topic of biodiversity protection are held with the **Biosphere Reserve** every year. In 2015 and 2016, **teacher training** took place on the subject of bees, accompanied by the Rhön beekeeper Sonja Heinemann. As a beekeeping patron, Sonja Heinemann also looks after the Bionade Bee project (see point 1).

In 2015, Bionade was also for the first time involved in the nationwide "**Day of the regions**" initiative. This initiative aimed to highlight the strengths of a region with regional value chains, products and services and, above all, regional involvement in the economy and nature conservation. The aim of the initiative is after all to preserve and promote the diversity of the regional economy, culture and species. With over 1,500 events, the Day of the Regions

offers a comprehensive insight into Germany's regional diversity. In collaboration with representatives from the Rhön Region, this "Bionade Day" took place at the Bionade factory premises in Ostheim vor der Rhön. A wide range of information on offer relating to nature conservation and environmental education, including stalls from the Rhön Biosphere Reserve, the Rhöniversum and the LBV association for the protection of birds, gave the opportunity to impart knowledge and exchange information.

In September 2016, Bionade extended an invitation to a **Dialogue board** entitled "Responsibility for habitat" at the Ostheim vor der Rhön site. Representatives from the world of economics, politics, nature conservation and environmental education presented lectures and discussions on their challenges and achievements in the fields of "Water conservation", "Organic farming", "Biodiversity" and "Preserving the cultural landscape". There was subsequently time for a discussion and suggestions for future collaboration between the various players, also beyond the Rhön Region, for the long-term safeguarding of biodiversity.

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