

'Biodiversity Friend' farm certification

Description

The World Biodiversity Association is a not for profit organization founded in 2004 at the Museum of Natural History of Verona by a group of naturalists. The Association has two missions: **"Discovering biodiversity"**, through naturalistic expeditions to the biodiversity hot-spots all over the world, and **"Conservation by education"** to confirm the fundamental role of education in the conservation of natural environments.

Since 2008 WBA is supported by a Scientific Committee and is the publishing house of the following series: "Memoirs on Biodiversity", "WBA Monographs" and "WBA Handbooks". The WBA supports the Biodiversity Project, by organizing the annual "Biodiversity Day" and by buying tens of hectares of tropical rainforest in Ecuador.

In the course of 2010, declared by United Nations "International Year of Biodiversity", the WBA proposed "Biodiversity Friend", the first certification that evaluates and scores the biodiversity conservation in agriculture. It is a standard concerning farms engaged in conservation actions for increasing biodiversity. The certifications evaluates the following actions:

- methods of parasites and weed control
- methods of soil fertility reconstitution
- sustainable water management
- spread of hedges and woods
- spread of nectariferous species
- soil, water and air quality
- conservation of the agrobiodiversity
- use of renewable energy
- lower CO₂ production and CO₂ storage
- activities with beneficial effects on biodiversity.

The environmental responsibility is evaluated by means of soil, water and air biodiversity indices, based on biomonitoring, developed by the WBA Scientific Committee.

The standard BF certifies the environmental responsibility of the farm by assigning a score to each above-mentioned actions. The farm must get a minimum score of 60 out of 100 to be certified. To maintain the certification the farmer must make an effort to safeguard and increase biodiversity through effective actions that are suggested by the certifiers and verified in the following audits.

When the farm get a score of 80 out of 100, no more improvement is needed. The "Biodiversity Friend" farms have been certified in Italy by CSQA, the Italian company leader in agri-food certification.

In 2010 "Biodiversity Friend" obtained the patronage of the Ministry of Agricultural, Food and Forestry Policies of Italy. The brand "Biodiversity Friend" is exclusive property of the WBA and has been registered as an international trademark in Italy, European Union and China by the *World Intellectual Property Organization* of Madrid and in U.S.A. by the *United States Patent and Trademark Office*.

Benefits for business

The farms certified "Biodiversity Friend" give guarantees to the consumer that their products come from an agrosystem with a high level of naturality, with low impact processes. The application of the BF standard can contribute to the environmental improvement. Considering that today many illnesses are just directly related to environmental pollution and to poor quality food, good environment and food can have positive effects on the health state of the people.

A good quality agrosystem can have positive effects on the farm development; landscape can be more attractive to people that like agritourism. The presence in the agricultural landscape of hedges and woods, the most attention to the air, water and soil quality, the conservation of traditional agricultural varieties and autochthonous animal races, will allow an improvement of the landscape, where the farmers can be considered as real custodian of the agro-biodiversity.

Until now about 50 farms were certified "Biodiversity Friend" in Italy (Veneto, Lombardy, Tuscany, Puglia, Sicily and Sardinia); about 40% of them are organic farms, the remaining farms follow integrated production practices. Most of them placed on the market their products with the brand BF to show the consumers their engagement in biodiversity conservation.

Since 2014, turnover has been about 20,000 euro/year. But in 2015 BF was inserted in the Project of the Regione Veneto "Qualitative Characterization of the cultivation environ-

ments of the fruit and vegetable products”.
175 farms are to be evaluated and the annual
turnover will increase to 200,000 euro.

WBA itself is a not-for-profit so WBA turnover
itself is not a benefit to business. The benefit
to business to date accrues to the 50 farms
that have been certified, and the 175
additional farms to be certified in 2015. This
benefit is difficult to quantify, but may arise in
a number of ways, including price premiums,
access to larger or more stable markets,
enhanced market share, reduced compliance
costs, supply-side benefits and reputational
gains (Duke et al 2013). The BF scheme
appears to have gained a foothold in the
Veneto Region and, more generally, in
viticulture. Focussing on particular regions
and/or sectors may be the schemes best
approach to consolidation.

Benefits for biodiversity

The increase of woodlands and hedges in
agrosystems (together with the preservation
and recovery of dry stone walls) allows not
only to preserve biodiversity, but also to
improve landscape and reduce
hydrogeological instability. The presence of
nectariferous species contributes to the
spread of pollinators through our project “Bees
for Biodiversity” and the installation on farms
of “Insect Houses” for nesting of wild
pollinators (Hymenoptera and others).

The *spread of hedges* throughout the
agrosystems favours the presence of natural
enemies of crop pests and diseases, with a
progressive *reduction of pesticides and
herbicides treatments*. At the same time the
reintroduction of natural vegetation in
cultivated land reduces CO₂ emissions and
increases CO₂ storage in vegetal tissues.
Other actions such as the increase of woods,
the leaving of dead timber and the use of
multi-year rotations, increase biodiversity in
the agrosystems, improving the quality of air,
water and soil.

Furthermore, BF preserves agrobiodiversity
and autochthonous genetic resources through
the recovery of traditional crop varieties and
animal races. In this way, the agricultural
lands can change back to bear expression of
the rural tradition, in all its historical, socio-
economic and cultural aspects.

WBA has already discussed application of BF
protocol to other European agricultural dis-

tricts. BF methods to assess the quality of soil,
water and air in cultivated lands were
developed for temperate areas, including the
Mediterranean and North Europe. The goal of
WBA for the next years is to propagate this
new idea of agriculture all over the Europe.
Our “dream” is to change, by a bottom-up
process, the industrial agriculture to a real
“sustainable agriculture”.

In our opinion, the opportunities for European
agriculture appear to be very good. Every
Country could develop and value their typical
products, finding the right equilibrium between
production **and** conservation. Many young
*agronomists, naturalists, environmental
engineers, qualified technicians in agriculture,*
could find real opportunities in supporting
farms in this “conversion path”. They can
qualify themselves as certifiers of the protocol
BF and follow the steps toward the final result.
This process for an agriculture with “more
biodiversity and less pesticides” will allow an
improvement of the environmental conditions
and *a better quality of the agricultural
products*.

Contacts with tropical and sub-tropical
countries to adapt BF to their agricultural
situation have been already established.

WBA has developed a set of indicators to
assess enhancements in biodiversity. Without
objective evidence for the improvement of
indicator scores over time, it is difficult to
assess the impact of the scheme on
biodiversity. A 2012 review of certification
schemes¹ noted that there is little objective
evidence demonstrating the impact of
certification schemes on biodiversity;
however, BF [continuous improvement of
actions to increase biodiversity in the field](#). By
enhancing habitat heterogeneity and
supporting pollinators, the scheme is likely to
enhance biodiversity locally. Many actions
applied under BF are [considered to be useful
for increasing biodiversity](#). However,
certification schemes deal with individual
producers, while some pressures on
biodiversity cannot be addressed at this scale.
In the short-medium term, benefits to
biodiversity seem likely to be limited to a few
hundred landholdings though the scheme has
potential for wider impact on biodiversity, in
particular in Italy.

Scalability

WBA onlus is an organization based on volunteering without a marketing team dedicated to promote the protocol BF. In order to grant impartiality of certification, the third party institution (the above mentioned CSQA), has also a marginal role in divulgation of the new brand. However, in the last two years, the popularization work of Paolo Fontana (WBA President) and Gianfranco Caoduro (WBA Honorary President), together with the WBA websites and editorial activities, have allowed to make our standard known not only in Italy but also in Europe, and out of Europe (Philippines, Mexico, Ecuador, Argentina). In Italy the situation is really good because the interest around our certification is everyday higher. Especially the viticultural farms are very attracted by BF brand that can show their environmental responsibility to the consumers. Also some Italian Regions (e.g. Veneto) are interested in the application of BF standard in their agricultural context. WBA was recently contacted by an important consortium in northern Italy, consisting of thousands of fruit producers. The consortium is interested in the BF standard and WBA conducted a pre-audit process to verify the possibility of certification. The same pre-audit was made in July for Soave Consortium (Verona): 3000 producers, 7000 hectares of vineyards. Also regarding European Countries the trend appears favourable. In particular, two important multinational groups (Germany and Belgium), worldwide suppliers of fruits and vegetables, contacted (2011 and 2013) WBA to certify BF their Italian supplier farms. During 2014 and 2015 the first supplier farms of both the groups were certified.

WBA appears to be experiencing reasonable take-up of its certification scheme in some regions of Italy and in particular in viticulture, and appears to have some initial interest from outside Italy. However, there exist a multiplicity of certification schemes worldwide and WBA may find it challenging to expand beyond its home market. In general, there is growing demand for sustainably-supplied commodities. However, the scale of possible certification is necessarily limited, as noted by KPMG (2012). "Not all producers or farmers can be certified or will find it worthwhile undergoing the entire certification process... Once certification increases its reach, companies will not necessarily gain a compe-

titive advantage in being certified, and alternative options may be cheaper and easier." However, BF offers the possibility to certify not only individual farmers but also Producers Organizations, and this can reduce significantly the certification costs for each farmer.

Feasibility

Barriers to development of the opportunity. The industrial agriculture system is based on consumption of natural resources and use of pesticides and fossil energy at unsustainable rates, contributing to environmental degradation and loss of biodiversity. The opposition of this system to new sustainable forms of cultivation will be surely very strong; but today more and more farmers are realizing that they can produce in a more sustainable way by using good practices methods inspired to organic farming or integrated production. For both these methods the priority must be the conservation of biodiversity and environment in the agrosystems. Until now the diffusion of the brand "Biodiversity Friend" has not been widely applied for many reasons: deficiency of funding, promotion and means of communication together with the lack of actions oriented to support innovation coming from nonprofit organizations. The complexity of procedures of the EU projects also affects negatively the outcomes and discourage the involvement of not structured companies.

Potential actions to accelerate uptake:

Enabling actions: In 2010 Biodiversity Friend obtained the patronage of the Italian Ministry of Agriculture, but it is not yet officially recognized as a control system to certify the conservation of biodiversity in agriculture. This would be the first step in a process that can lead to the accreditation of the method in the agricultural system of Italy and Europe. WBA agronomists are working to reorganize the certification procedures and adapt the BF standard to the *European Certification System*. After this adaptation process and its official recognition, the BF Standard can be promoted among farmers and consumers. In particular, the sensitivity of younger generations towards environmentally friendly life and sustainable consumption can be instrumental in spreading a new "culture of respect": respect for all living creatures, respect for landscape and nature, respect for physical and mental health of the people, respect for our forefathers and, overall, respect for the coming generations.

These themes are already promoted by WBA through educational projects (e.g. SOS Project - Sustainability Oriented Schools) in the context of the mission “Conservation by Education”.

Other opportunities could be, synthetically, the following:

1) WBA wants to promote the use of the **biodiversity indices** for assessment of soil, water and air quality in the schools. The biodiversity indices of BF are simple procedures to evaluate the environmental parameters based on biological indicators that can be easily identify also by students. In this way every student will become a “thinking citizen” able to understand if his life environment is altered, simply observing the presence of lichens on barks, or invertebrates communities in soil and water.

2) WBA wants to spread the BF certification through documentaries and short films to promote on the web.

3) In the next month will be published the first volume of the new series “Biodiversity Friend” dedicated to natural beekeeping, using top bar hives. It will be the first contribution to the diffusion of a new way to consider the relations between man and nature.

4) Some Tuscan municipalities with farms certified BF asked for WBA if it was possible to certify BF the entire territory of the municipality. This question generated an internal debate which allowed to elaborate a new protocol to extend BF from agriculture to territory and urban areas.

Research and innovation needs: Since 2010 the Protocol Biodiversity Friend was revised eight times. The application of the methods in the field permitted to adapt the standard to different environment and agricultural managements. These adaptations were controlled by the WBA Scientific Committee in collaboration with the University of Padua and University of Parma. New synthetic biomonitoring methods were tested in different conditions and were compared with the traditional methods to test their scientific validity. These research activities were conducted by volunteer agronomists and entomologists of the WBA. New researches are to be started in next months, in particular in the determination of the Lichen biodiversity Index for the evaluation of air quality. This new research program will involve volunteer liche-

nologists of WBA together with the University of Trieste. Obviously many problems could be resolved with the availability of supporting funds, but the lack of them can only delay but not stop our implementation projects.

WBA identify lack of funding and ability to communicate the scheme widely as key constraints. In expanding BF, WBA are likely to meet other challenges. In a review of the opportunity presented by biodiversity certification schemes, Duke et al (2013)² note that “*The ease and practicality of expanding and developing agri-food certification schemes will depend on a set of key factors. These include certification and compliance costs for producers to participate in the scheme, the balance between a ‘niche’ versus a more universal scheme whereby business benefits can decrease as environmental protection increases, and opportunities for public private partnerships and earned recognition as incentives for participation. B2C schemes need to consider issues such as avoiding label saturation for consumers and enhancing consumer confidence in labelling schemes. All schemes need to ensure they provide ‘real’ ecosystem benefits, and not just ‘greenwash’.*” It will also be important to consider the balance between different social and environmental priorities, and awareness of changing trends and preferences.”

Public-private partnership (Y/N)

YES. WBA is a not-for-profit, developing certification schemes that aim to secure government accreditation, for the benefit of private sector producers.

Summary

BF is a promising biodiversity certification scheme that has potential to deliver substantial benefit to businesses and to nature, notably in certain regions of Italy and/or certain agricultural sectors (e.g. viticulture). Scalability will be constrained by the proliferation of such schemes in Europe and the limit to the number of farmers who may wish to engage. A range of factors limit feasibility, not least label saturation issues.

References:

www.biodiversityfriend.org

www.biodiversityassociation.org

<https://www.youtube.com/watch?v=QgkuO3hcwpQ>

¹KPMG (2012). *Certification and biodiversity, exploring the effectiveness of certification schemes in biodiversity*. KPMG.

²Duke, G., Conway, M., Dickie, I., Juniper, T., Quick, T., Rayment, M., Smith, S., (2013). *EMTF Second Phase Research: Opportunities for UK Business that Protect and/or Value Nature*. Final Report. ICF GHK, London.

<http://webarchive.nationalarchives.gov.uk/20140305102305/http://www.defra.gov.uk/ecosystem-markets/files/EMTF-2nd-Phase-Research-Final-Report.pdf>

Notes:

ⁱ 'Greenwashing' refers to the use of environmental claims in a false or misleading way. See, for example, TerraChoice (2010) for more information about the problems associated with 'greenwashing'.