## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Key Figures for 2020</td>
<td>8</td>
</tr>
<tr>
<td>Selected Project Updates</td>
<td>9</td>
</tr>
<tr>
<td>New Harvest</td>
<td>11</td>
</tr>
<tr>
<td>Swiss Food Research</td>
<td>12</td>
</tr>
<tr>
<td>Wageningen University</td>
<td>13</td>
</tr>
<tr>
<td>Stiftung Fintan</td>
<td>14</td>
</tr>
<tr>
<td>Sources</td>
<td>16</td>
</tr>
</tbody>
</table>

Published by: AVINA Stiftung  
Authors: Viktoria Schmidheiny, Laurenz Werner, Stephan Zacke  
August 2020
HOW CAN WE LIVE A SUSTAINABLE LIFE?

Stephan Zacke

The past year has been one of political, social and ecological upheaval, but one crisis dominated all others – the impact of a pandemic unprecedented in the modern age. While COVID-19 presented us with countless challenges, the way we met them boosted and accelerated plenty of positive effects. Just two of the many beneficial side-effects, sustainability and healthy eating are attracting more attention than ever before, for example.

This Annual Report offers a look behind the scenes at the work of our foundation, AVINA Stiftung, and ventures a look ahead to 2021. We highlight what our carefully chosen project partners have been doing, and what successes they have been able to report.

The circumstances forced many of AVINA’s activities to relocate to digital media. These have a great deal to offer, but do make some processes more difficult, especially where networking is concerned. Without conferences and meetings to attend, we were able to turn our gaze inward. We used the time to hone AVINA’s strategy still further and to realign ourselves accordingly, where necessary.

We have been drawn increasingly to the topics of circularity and regeneration. Both of these ideas can – and must – be applied to every link of the value chain. To us, sustainability means balance. We seek equilibrium with momentum. A system that is both dynamic and durable.

As a charitable foundation we aim to make a difference where our work will have the greatest leverage effect. We deliberately position ourselves in fields in which financial resources are lacking. Rethinking our food systems demands innovation, creativity, and courage. In a constantly and rapidly changing market, we must remain agile and flexible if we are to respond to shifting needs. Funding for sustainable healthy food projects is still scarce, especially in later stages of research through to just before market launch. That is precisely where we believe our niche to be.

The new AVINA website went online as Switzerland was going into its first lockdown. Its minimalist design is intended to focus attention on what is most important to us – our project partners.
“The world is not whole, but healable.”

Viktor Frankl
Introduction

We are not here to promote ourselves, but to support specific individuals whose ideas and visions speak for themselves. We stay in the wings as the experts, pioneers and innovators take center stage.

There were on the staffing front at AVINA in 2020. Advisor to the Board Heinz Pauli, whose creativity, enthusiasm, and experience made him an enormous asset to the Foundation, has stepped down to enjoy his well-earned retirement. As a member of the working group that drove AVINA’s realignment, he takes most of the credit for our valuable contact network. He played a major part in identifying pioneering projects, and guided the Board of Trustees to its goal of a new strategy. Without his initiative AVINA would certainly not be where it is today. We are enormously grateful to him, and delighted that he will continue to support us in a less formal capacity.

Despite, or indeed because of, the extraordinary challenges of 2020, we look with confidence to the future. Sustainable, healthy food is a more pressing issue than ever. Obstacles that still seemed insurmountable just a short time ago have been cleared with ease. The projects that AVINA supports all have one thing in common. The solutions and approaches that they offer may be crafted at the local level, but they are applicable globally. In a more sustainable food system, everyone ultimately wins.

We are pleased and proud to be able to sponsor, support and stretch our project partners on their journeys. The developments of recent months have also confirmed to us that our new path is the right one.
Active projects at start of 2020: 41
Active projects at end of 2020: 29
Projects completed successfully in 2020: 12

Number of grant requests received: 126
Number of grant requests presented to Board of Trustees: 21
Number of grant requests accepted: 11

15.5 million CHF in total funding allocated
8.1 million CHF in total funding disbursed
SELECTED PROJECT UPDATES

New Harvest
New Harvest is a non-profit organization that funds and conducts open and public research in the field of cellular agriculture. Its aim is to produce animal products such as meat, milk, and eggs without using animals.
AVINA supports New Harvest in advancing this research, defining regulatory standards and establishing itself as the global, independent research center of excellence for cellular agriculture.

Swiss Food Research
Swiss Food Research is a non-profit association that aims to support Swiss food companies and their suppliers in adopting research-based innovations, and thereby contribute to a robust and sustainable robust agro-food industry.
AVINA supports Swiss Food Research, an independent matchmaking organization in the Swiss food sector, and through it funds innovative products, services, and pioneering research initiatives.

Wageningen University
Hannah van Zanten is associate professor in the Farming Systems Ecology Group at Wageningen University. Her research focuses on optimizing the use of biomass, which can only be guaranteed in circular agro-food systems.
AVINA supports Hannah van Zanten in developing a model that, given a balanced diet, calculates the optimum circular agricultural use of a defined land area.

Stiftung Fintan
One of the Stiftung Fintan’s focus areas is the independent supply of GMO-free seed to the organic farming industry. The foundation concentrates on both the biodynamic breeding of new varieties and preserving old varieties to encourage both diversity and sustainability in seed breeding and propagation.
AVINA believes that seed should be a common resource, and so supports the Stiftung Fintan with its research and its work to both develop and preserve vegetable varieties. We want to help maintain and expand biodiversity in farming.
Cellular agriculture gained huge momentum in 2020. Startups presented or reported on their breakthroughs, while financing rounds increased in scale and frequency. On the research side, too, more and more universities and research institutes are taking a deep dive into the sector. So too are the regulators, of course. Much of this impetus is due to the initiative and valuable work of New Harvest.

The groundbreaking research that New Harvest supports was extended still further in 2020. Seven new fellows were accepted into the program, which currently supports 19 researchers in total.

A podcast, entitled “Cultured Meat and Future Food”, was recorded with individual fellows to raise their profiles among the general public.

New Harvest’s Cultured Meat Safety Initiative is another first. It brought together 50 cultured meat startups – accounting for 70% of the market – to define safety standards for the production of cell-based meat. The standards were then published in a scientific paper. In the future they will help both startups and regulators to apply the proper guidelines.

The pandemic year of 2020 was also one of structural change for New Harvest, however. It closed its office in New York and moved the organization to digital working. It also relaunched its website and expanded its team in strategic areas to grow its Research Coordination, Research Outreach, and Operations groups.
In times of crisis the importance of innovation to keep the economy running soon becomes clear. Innovation in the agro-food sector is Swiss Food Research's very area of expertise. The organization matchmakes to achieve goals and impact, and supports scientifically-backed innovation through applied research, specifically.

In partnership with the Food & Nutrition cluster, Swiss Food Research is responsible for the Swiss Food Ecosystems innovation booster. The aim here is to unite many disciplines in an open innovation approach, generating both original and disruptive ideas to transform the food system as a whole.

Swiss Food Research now has nine innovation groups that unite experts from different fields to discuss research and application topics, as well as trend- and needs-based innovations. These innovation groups are complemented by research calls – a scheme in which ideas and concepts receive financial and specialist support in the research project’s early stages. Swiss Food Research was able to fund nine of these innovative projects in 2020.

The network’s growing membership reflects the value of Swiss Food Research’s network to the sector. It stood at around 150 as at the end of 2020, consisting of small startups, SMEs, research institutes and universities, not to mention major multinational conglomerates.

Swiss Food Research is an important element of the innovation ecosystem as a whole. Innosuisse began efforts to strengthen the system via the National Thematic Networks nine years ago. From now on its work will be supported by the community of its users. As Swiss Food Research’s principal source of financial support, AVINA currently plays a major role.
It is already widely known that common agricultural practices today are neither sustainable nor scalable. Hannah van Zanten researches circular food systems at Wageningen University in the Netherlands. The aim of this research is to reorient agriculture towards circularity and thus ensure sustainable regional food supplies.

This will involve optimizing land and fertilizer use, minimizing greenhouse gas emissions and water consumption, and doing as much as possible to preserve biodiversity. This in turn requires an analysis of how different agricultural practices impact on these factors.

The past year was used to refine the project’s approach, for data collection, cleansing and preparation, and to begin developing a model.

Hannah van Zanten added two doctoral students to her team for this phase. They will concentrate specifically on diversity and on the fertilizer use, and support Hannah with the production and validation of the model. Further doctoral students are also working on the project. They are examining how to optimize agricultural activities from both the plant and animal perspectives.

In its first phase, the model’s geographical focus will be on the EU in general and the Netherlands in particular. It may subsequently be expanded to the global level.
“We live in a dangerous age. Man controls nature before he has learned to control himself.”

Albert Schweitzer
Demand for biodynamic and organic seed hit an all-time high in the crisis year of 2020. Motivated by lockdown, more people began to occupy themselves with sustainable plant and vegetable cultivation – in their own gardens. The sales figures for organic seed reflect this and confirm the momentum that has been building in this sector in recent years.

As demand rose, Stiftung Fintan reconfigured its team of seed breeders and began the search for more land on which to expand.

Thanks to the support of AVINA, the foundation was able to register a range of new varieties, including Chinese cabbage, carrots, runner beans, and tomatoes.

Initiatives to breed for flavor were given additional support. Crop yields and plants’ resistance against disease are frequently seen as the most important things in modern agriculture. They are important in themselves, of course, but often not sustainable enough in themselves. Flavor and nutritional content are not given the attention they need and deserve.

International partnerships with other breeding and propagation organizations are to be stepped up further to drive biodynamic breeding around the world. AVINA supports projects in India, Egypt, Argentina, and Brazil with both expertise and internships.
## SOURCES

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Times</td>
<td>singapore lab meat</td>
</tr>
<tr>
<td>New Harvest</td>
<td>how we support</td>
</tr>
<tr>
<td>anchor.fm</td>
<td>futurefoodshow</td>
</tr>
<tr>
<td>authorea.com</td>
<td>food safety considerations</td>
</tr>
<tr>
<td>New Harvest</td>
<td></td>
</tr>
<tr>
<td>New Harvest</td>
<td>our people</td>
</tr>
<tr>
<td>Swiss food eco systems</td>
<td>innovation groups</td>
</tr>
<tr>
<td>Swiss food eco systems</td>
<td>research calls</td>
</tr>
<tr>
<td>Swiss food eco systems</td>
<td>network/members</td>
</tr>
<tr>
<td>circularfoodsystems</td>
<td>circularfoodsystems</td>
</tr>
<tr>
<td>circularfoodsystems</td>
<td>Project Soil</td>
</tr>
<tr>
<td>circularfoodsystems</td>
<td>Project Cropland</td>
</tr>
<tr>
<td>circularfoodsystems</td>
<td>Project Animal Production</td>
</tr>
<tr>
<td>Sativa Rheinau</td>
<td>organic seed</td>
</tr>
</tbody>
</table>