## **BigPicnic**

## Recommendations



## What is **BigPicnic**?

BigPicnic is a three-year, EU funded project that brings together the public, scientists, researchers, food and agriculture industries and NGOs to talk about food security.

Our definition of food security looks like this and considers access to food, food safety, food sovereignty all underpinned by culture and heritage.

The aim of BigPicnic is to generate public dialogue about food and food security to support future Responsible Research and Innovation (RRI) related to these ideas.

RRI describes a new approach to research and ethically acceptable and sustainable innovation that aims to align the outcomes of scientific and technological advances with the values and needs of society by involving diverse groups of people, including citizens, researchers, policy-makers and businesses, throughout the entire process.

#### How is this being achieved?

Each botanic garden involved in the bigPicnic partnership has cocreated exhibitions and science cafés with their local audiences, including groups of people they don't usually work with.

Co-creation is an innovative and participatory process which aims to create shared ownership of a project between institutions and community partners. In our case this means working with local stakeholders to develop the exhibitions and science cafés from scratch. Therefore, the structure and themes of these activities are dictated by the public and not the gardens.

As a result of this process, the BigPicnic exhibitions were able to reach around 180,000 people. In addition the 102 science cafés, which are informal science events that bring together the public and researchers, were attended by about 6,000 participants.

A special form of participatory evaluation called Team-Based Inquiry was employed to ensure the activities were delivered to the highest possible standard and also helped to record and analyse the conversations that were sparked as a result of these exhibitions and events.

The results of these conversations have been compiled and used to generate these recommendations for policy-makers and informal learning sites to support RRI in food and food security.

#### Access

Ensuring all people across the world have access to sufficient food to meet their dietary needs

## Food Security

#### Sovereignty

Empowering people to make their own choices about the food they eat, where it has come from and how it has been produced

#### Safety

Ensuring people have healthy, nutritious food that is free from contamination or degradation

#### Heritage

Supporting culinary traditions and knowledging that they help to shap and are shaped by personal and collective identities



The exhibitions and science cafés covered and generated debate of a broad range of subjects including:

- Food waste
- The food demand gap
- Urban gardening
- Erosion of knowledge of growing food
- Soil use
- Identity and eating habits/food choices
- Cultural aspects of food
- Insects as a protein source
- Pollination
- · Climate change
- Crop wild relatives
- · Household food security
- Agro-ecology
- Ending world hunger
- Gastronomy
- Mindful eating
- Securing food for the future
- The role of schools
- Food trends
- Increasing crop production
- Crop sustainability
- Local production
- Nutrition and ethics
- Healthy food
- Alternative supply chains
- Urban farming
- GMOs



## **BigPicnic recommendations**

	Recommendations
FOOD AND HERITAGE	• Food and heritage: The cultural heritage dimension of food should be embedded in food policy.
CLIMATE CHANGE	• <b>Climate change:</b> Increase the resilience of citizens, especially vulnerable groups, to climate change and increase climate neutrality of food systems.
SUSTAINABLE	• Sustainable food production: Future funding frameworks should address more efficient food loss and waste management, small scale food production and sustainable supply chains.
EDUCATION AND FOOD SECURITY	• Education and food security: Food and food security should be topics embedded throughout the formal and informal learning systems.
PARTICIPATORY	• <b>Using participatory approaches:</b> Use participatory approaches to raise unheard voices and broaden our perception of expertise.
ORGANISATIONAL	• <b>Organisational development through food security:</b> Organisations should embrace new approaches and draw on a broad spectrum of expertise as catalysts for change.

Food security is one of the greatest challenges facing society today. According to the Food and Agriculture Organization: (FAO) "food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life"<sup>1</sup>. Yet, decisions about food policy are often top down and do not provide all societal actors with a chance to contribute or engage with the debate. BigPicnic used participatory approaches to facilitate dialogue between different actors and ensure future research, innovation and policy reflects the opinions and needs of these wider audience groups. Using participatory approaches addresses different needs, supports organisations to develop and grow, and empowers all actors to take responsibility to address the big issues facing our society.

Using the BigPicnic project data, a series of policy briefs have been developed. Food production, sustainability and the climate, participation, education and organisational development were all shown to be important in the context of the project and food security. The common thread that unites all of these individual areas is heritage and the role that food plays in our individual lives. To address food security, heritage and its overarching influence in all aspects of the debate must be acknowledged.

There are six BigPicnic policy briefs. Four aim to support policy makers to shape future food policies and funding frameworks and two seek to support informal learning sites to apply the learning that occurred throughout the project. To highlight where BigPicnic findings link to existing frameworks and illuminate gaps in current policy, each policy brief maps the BigPicnic recommendations to the most relevant United Nations Sustainibility Goals (SDGs) and the European Union's Food 2030 Priorities.

<sup>1</sup>FAO (1996). *Rome Declaration on World Food Security*. World Food Summit, 13th-17th November 1996, Rome.

#### The BigPicnic recommendations

#### For policy makers

- BigPicnic policy brief 1:
  Food and heritage
- BigPicnic policy brief 2: **Climate change**
- BigPicnic policy brief 3:
  Sustainable food production
- BigPicnic policy brief 4:
  Education and food security

#### For informal learning sites

- BigPicnic policy brief 5: Using participatory approaches
- BigPicnic policy brief 6:
  Organisational development through food security







# **Big**Picnic

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## BigPicnic policy brief 1: Food and heritage

#### **BIGPICNIC TOPIC**





United Nations Sustainable Development Goals

### **Recommendations**

Overall: The cultural heritage dimension of food should be embedded in food policy.

- Articulate the cultural heritage value of food across all food security policy priority areas.
- Use open, participatory approaches to further explore material and immaterial aspects connected to food and food heritage.
- Enhance cultural diversity in food use and food systems.
- Protect cultural traditions related to food and embed them in strategies for social cohesion.
- Support the acquisition of (traditional) food products and food processing skills as a means to enhance food sovereignty on familial, regional and national levels.

#### Background

Food security is one of the greatest challenges facing society today, yet the term 'food security' means many different things to different people and in different contexts. According to the Food and Agriculture Organization (FAO): "food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life".<sup>1</sup> Thus many definitions of food security (including the BigPicnic's initial definition) focus on three key elements – access, sovereignty and safety. There is however a key parameter that is to a greater extent omitted from both the key definitions and the associated European and global policies that deal with food and sustainable developments – heritage. Heritage is about supporting culinary traditions and acknowledging that they help to shape personal and collective identities. There is a growing awareness and recognition of the vital importance of heritage as illustrated by 'The Convention for the Safeguarding of Intangible Cultural Heritage' adopted by UNESCO<sup>2</sup>. However, more evidence is required to emphasise the important relationship between heritage and food and embed this within discussions about the future of our food. Including this element in food security policy priority areas will provide impetus for increased attention, including research and funding.

#### Findings

BigPicnic Partners clearly highlighted the importance of food as cultural heritage. Food is closely linked to individual and national identity, culture, tradition and memory. The project data provided a rich source of information on this subject which is explored below.

#### Cultural diversity in food use and food systems

People are personally attached to the food they grew up with which, in some cases, may include lesser known food crops. Specific food systems are associated with an individual's own heritage, and growing or collecting their own food is part of their culture. BigPicnic's audiences addressed the importance of cultural diversity in both food use and in food systems more generally (including transport, production, processing, distribution and logistics). This was often done through a comparison of past and present approaches to food.

Food was linked to religious, political and ethical values. Traditional ways of eating include eating that belongs to certain situations and traditions (e.g. family tradition), and ways of eating that individuals have grown up with that are seasonal and familiar. Additionally, social class appears to play a key role in this theme as do ethical values.

#### **Traditional eating**

Specific types of food are often associated with certain situations (events, celebrations) and traditions (familial, regional or national). The notion of seasonality and the value of home food, the link between territory and culture all have importance for communities.

#### **Context of eating**

Food was demonstrated to have a specific value in the context of social interaction (the importance of sharing food and eating with others) and food habits are often defined by social norms (pressure provided by the society) and social image (what is trendy).

#### **Food stories/memories**

Food appears to have strong associations with specific memories and stories that people keep and remember. These memories are emotionally charged and feature all the senses, which makes them very powerful.

#### Migration

In the context of diaspora communities, access to ingredients from the home country and knowledge of traditional food preparation are deemed important. People living in foreign countries often have to adapt their food habits as a consequence of adapting their wider lifestyles and ways of living. However, food can also serve as a way to 'reconnect' with the home country.

#### Quotes

"I'm worried that everything will start tasting the same. That all the special flavours you used to have will start tasting like white bread and cheese, because marketers think that everyone wants sugar in their food. Now you have all these varieties that get sweeter and sweeter. Apples are allowed to be sour, but apparently you can't sell those. Apples already taste too sweet for me, but now they are all becoming uniform. It's like a dog biting its own tail. It will come back I think, these are only trends, people are probably asking for the old varieties."

#### **Participant in Leiden, The Netherlands**

<sup>44</sup>My favourite food memory is, growing up as a child in Eastern Nigeria and going to the village during the rainy season and sitting with the family, roasting corn and African Pear...it's just, you know, the ambience, sitting with your family, the feeling...this is part of the things that remind about my childhood and one of my favourite food memories.<sup>99</sup>

**Participant in Meise, Belgium** 

As food is widely acknowledged for its importance in expressing identity it was not surprising to receive feedback that addressed links between food and migration. Audiences underlined the significance of having access to ingredients for the preparation of home country food and reflected on how easy or difficult it is to find them. This was combined with comments about the knowledge of preparing food in the way that it is eaten in the home country of the respondent. Nevertheless, people acknowledged that they have adapted their lifestyle due to migration.

#### Conclusion

Efforts to address food security at the policy, organisational or individual level should acknowledge the essential role that heritage plays in people's relationship with food. In particular, this should take into account the importance of food in relation to memory and the expression of national identity and different religious, political and ethical values as well as traditional ways of eating.

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<sup>&</sup>lt;sup>1</sup>FAO (1996). *Rome Declaration on World Food Security*. World Food Summit, 13th-17th November 1996, Rome. <sup>2</sup>UNESCO (2018). *Basic texts of the 2003 convention for the safeguarding of the intangible cultural heritaae*. UNESCO



## BigPicnic policy brief 2: Climate change

#### **BIGPICNIC TOPIC**



#### FOOD 2030 PRIORITIES





SDGs

United Nations Sustainable Development Goals

### **Recommendations**

Overall: Increase the resilience of citizens, especially vulnerable groups, to climate change and increase climate neutrality of food systems.

- Ensure that agricultural as well as general climate change mitigation and adaptation policies, programmes, strategies and actions are fully consistent with existing food security related commitments.
- Support Civil Society Organisations, small-scale producer organisations, and women farmer organisations, as well as local communities and vulnerable groups to participate in decision making and the implementation of food security policies and programmes to address climate change and support climate change adaptation.
- Provide training and support, at all levels of the food system, on climate smart agriculture as a means of mitigating and adapting to climate change.
- Reduce excessive food imports.
- Reduce agriculture that is based on monocultures and protect biodiversity as a means of climate change resilience.

#### Background

Climate change is increasingly recognised as an issue of urgent concern and an imminent threat on a global scale. Around 10-12% of annual emissions and 75% of global deforestation come from agriculture<sup>1</sup>. Therefore, climate change is an issue that our food systems must play a part in mitigating, as their contribution is significant. In addition, climate change has the potential to affect food security across a range of areas such as access, utilization and price stability<sup>2</sup>. Therefore, our food systems must be resilient if we are to ensure global food security. The BigPicnic Partners have organised a wide range of activities that addressed directly or indirectly the topic of climate change in relation to food security.



#### Findings

Participants in BigPicnic activities had a clear understanding of the links between climate change, agriculture and food security. They expressed their concerns about the overexploitation of resources, habitat degradation, erosion and deforestation, loss of biodiversity, pollination, pollution and pesticides or plagues. More specifically, the outcomes of the data gathered had a direct relevance to issues of climate change and environmental sustainability.

Audiences expressed their concerns and mentioned how changes in the climate threaten food production and how, at the same time, such changes are also influenced by food transport and consumption. These threats led to discussions about farmers' insecurity and the need for better state support while also demonstrating the fear that certain members of the public have. Farming practices that are unfriendly to the climate, unnecessary consumption patterns and the excessive import of products were also seen as elements with a negative impact on the climate. Monocultures impacting on the diversity of agriculture and the loss of species or traditional varieties were also highlighted as important concerns. Additionally, the potential for climate change causing infestation of pests and diseases that reduce the value of certain crops was also underlined as an important factor. Therefore, we must create conditions to facilitate access to a broader variety of food plants and crops including their genetic resources as well as a fair and equitable sharing of the benefits arising from their use.

#### Conclusion

It is essential to acknowledge the urgent need for actions to address the effects of climate change on food security. To achieve this, adaptation to climate change must be a priority for all farmers and food producers, including small-scale producers in urban environments. Approaches to mitigate and build resilience against climate change must take into account equitability and participatory approaches that enable both men and women to gain equitable access to information and resources when addressing food security in the context of climate change. At the same time, future programmes, actions and strategies must be fully consistent with existing food security related policies and frameworks. <sup>44</sup>If the climate changes as during this year, there won't be more food anymore anyway, technology won't help, the world is changing.<sup>99</sup>

#### **Participant in Warsaw, Poland**

<sup>44</sup>What is creepy is that we do not take care of the Earth and that we postpone doing something about climate change. It can be drought. Or colder here. We import a lot of food. We have very little production of our own food, well we have little access to food at all.<sup>99</sup>

#### **Participant in Oslo, Norway**

<sup>44</sup>We have to teach people what is sustainable because often what is economic is not sustainable. Often food that is cheap comes from the other side of the world.<sup>99</sup>

#### Participant in Lisbon, Portugal

<sup>1</sup>Cruz, A. (2016). *Flipping the issue: agriculture contributes to climate change*? [online] Available at: https://ccafs.cgiar.org/blog/flipping-issue-agriculture-contributes-climatechange#.XGVz8\_Z2uUm

<sup>2</sup>IPCC (2014). Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press

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## BigPicnic policy brief 3: Sustainable food production

#### **BIGPICNIC TOPIC**



#### FOOD 2030 PRIORITIES



SDGs



### **Recommendations**

Overall: Future funding frameworks should address more efficient food loss and waste management, small scale food production and sustainable supply chains.

- Support plant-focused sustainable urban and peri-urban agriculture from a commercial and community/household perspective to maximize the productivity of arable land and support local food.
- Support organisations involved in food security to adopt a systemic supply chain analysis and perspective to assist consumers in making healthy, sustainable and socially just food choices.
- Make food loss and waste prevention and management a pillar of food security and sovereignty activities.

#### Background

Food security is a complex issue and encompasses a huge diversity of topics such as food production, sustainability, health and nutrition and climate change. With such a complex picture involving many different stakeholders, priorities and considerations it can be challenging for non-experts to engage with this subject to both better understand and provide input. Botanic gardens, as centres of plant expertise and education, with strong links to scientific and academic audiences are well placed to act as hubs in their local communities, facilitating discussion and providing a place to explore food security topics.

#### Findings

The primary focus of the BigPicnic discussions and debates were to understand and draw out important issues and concerns that people have in relation to food security. For some of the issues highlighted there are natural solutions and these are detailed where they occur. However, for most of these issues there are no immediate, obvious solutions and thus the findings detailed below aim to showcase the common areas of concern and key issues that the project audiences feel it important to address.

#### **Urban gardening**

Urban gardens were considered to play a part in people's ability to access places to grow food, while community gardens and allotments appeared to be linked with the goals of making cities and communities safe and sustainable (SDG 11). Furthermore, having food gardens was deemed to be a good way for people to achieve self-sufficiency, sovereignty and their own food production. However, there was a perceived difference in the role of community gardens compared to allotments community gardens were regarded as a contributing factor to social integration, whereas ideas about allotments, while providing evidence of a generational shift, were more intertwined with how people viewed ownership. Allotments demonstrate a quest for both self-sustainability and a struggle for control of space which is emblematic of the wider environmental and political issues facing many countries today. The forging of partnerships/networks was also seen as a factor contributing positively towards tackling the challenges of the urban environment and problems.

#### Supply chains

Sustainable food production in the form of fair trade and organic products was seen as a factor contributing positively to responsible food production and consumption (SDG 12). Many of BigPicnic's co-created activities had a strong focus on pollination, highlighting the participants concerns over conservation of pollinators and farming practices that support this. The importance of trust and distrust between producers, suppliers and consumers was also raised as a significant issue. It was emphasised that knowing the farmers, establishing local

#### Quotes

<sup>44</sup>Well, when you start doing something differently, then suddenly you find people who also do things differently, these were food cooperatives, and I still work with them and will continue, these are fantastic places, because you feel at home there.<sup>39</sup>

#### **Participant in Warsaw, Poland**

<sup>46</sup>In a garbage bin food is thrown, this food has been grown / bred and when it is thrown away all the energy is wasted. In addition, a car has to pick up the food waste.<sup>99</sup>

#### **Participant in Oslo, Norway**

<sup>44</sup>When people ferment and process their food themselves and put work and energy into it, they pay more attention to where food comes from. And buy more organic food or grow it themselves. Home-grown food can be enjoyed much more. And you consume much more consciously.<sup>9</sup>

Participant in Berlin, Germany

partnerships, having a direct contact between the producer and the consumer with alternative distribution systems (as opposed to, for example, supermarkets) were all important elements.

#### Food waste and circularity

Audiences expressed concerns about government practices for waste prevention and sustainable habits. In some cases, food waste was seen as a political issue that could only be solved with better distribution. Food waste was highlighted as a significant problem and members of the public criticised the persistence of this phenomenon while issues of food poverty haven't been solved. Participants underlined that a greater control of the fresh food chain could better recover waste from supermarkets and this could guarantee the right to food to a larger number of citizens.

The practice of composting was seen as a way to contribute both to better food waste management and to circularity/recycling. Composting had a community bonding element while also having a politically charged context as it sometimes distinguishes grassroots approaches from the official state approach. Finally, marketing issues were mentioned as impacting on food trends and the visual appeal of specific products (for example, their availability in the supermarket and how they are presented respectively).

#### Conclusion

Issues that emerged covered both the supply and demand sides of the food chain and food systems. Sustainable food production was considered both within the context of nutrition and healthy diets (aligning with Priority 1 of the Food 2030 policy) and the efficiency and circularity of food systems (Priority 3 of the same policy). Both sustainable food production and sustainable food products were considered for their contribution to decent work and economic growth (SDG 8).

There should be greater support for local food production and consideration should be given to serving the increasing demand for urban gardening, community gardens and allotments. Participants noted the importance of preserving knowledge from local actors and taking the opportunity to construct and co-create knowledge, innovation and adaptation. At the same time, calling for production methods that support sustainability by protecting the land and reducing food waste. This can occur by recognizing the importance of the International Treaty on Plant Genetic Resources for Food and Agriculture and of the Nagoya Protocol adopted by the 10th Conference of Parties (COP) of the Convention on Biological Diversity (CBD).

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## BigPicnic policy brief 4: Education and food security

#### **BIGPICNIC TOPIC**



#### FOOD 2030 PRIORITIES



SDGs



United Nations Sustainable Development Goals

### **Recommendations**

Overall: Food and food security, should be topics embedded throughout the formal and informal learning systems.

- Provide consistent, accurate and accessible information and teaching / instruction from the earliest age possible about food, food products and processes.
- Include both cookery and growing food plants (using school gardens) in the national curriculum.
- Support projects that provide knowledge exchange for stakeholder groups, education staff and relevant audiences on food and food security topics that include the environmental and biological as well as the social and cultural dimensions.
- Draw on a variety of local expertise to implement situational cues that encourage healthy and culturally relevant food habits in places where food is available. These could include cues provided on packages, the availability of different types of food, and food pricing.
- Link healthy eating campaigns to sustainable production and consumption campaigns.

#### Background

It is increasingly important to both understand the concept of and adopt behaviours to improve food security locally, regionally, nationally and globally. People from different communities have a different relationship to food and food security/insecurity depending on their socio-economic and cultural background. Yet this topic with its environmental, biological, social (including social justice) and cultural dimensions are rarely dealt with in any meaningful way within our education systems. Thus embedding and updating the concept and value of food security, at all levels and for all age groups requires a lifelong learning approach. This is both a challenge and an opportunity for organisations across formal and informal learning settings. Both the formal and informal education sector are key to embedding the concepts and value of food security, not only for young children but up to and including those in tertiary education and throughout the wider community. Content knowledge is not enough, learning provision also has to embrace experiential learning to embed the concepts and values of food security. Botanic gardens have a key role as sites for advancing food-related conservation and food security within both their education and research work. They can capitalize on existing public engagement activities and connect to grassroots movements to jointly deliver more inclusive public engagement and education. In tandem with the formal education sector, informal learning settings such as botanic gardens, heritage organisations and museums have the opportunity to embed this topic with a broad range of audiences and communities.

#### Findings

Audiences identified the provision of food education as very important. In addition, the collected data also indicated that people value not only the raising of awareness about food related issues but also supporting behaviour change.

Points that were raised included understanding how to access information about food, the importance of food labels, the acquisition of food skills (i.e. how to grow, prepare, cook and handle food), knowing more about where food comes from and what constitutes a balanced diet. Awareness of the negative impact of obesity, eating disorders and the need for a healthy diet featured strongly in the empirical evidence collected. At the same time, people felt that information offered by the media and public authorities was not trustworthy, making it increasingly difficult to make informed choices. Co-created actions related to sustainability, culturally appropriate foods and their availability, and the promotion of these ideas were valued because they shape the necessary information provision for different communities.

#### Conclusion

Education is key to societal change and education with regards to food security requires an approach which is emotionally and culturally relevant. In addition, knowledge provision should have an actionable approach to ensure autonomy in making informed food choices. Embedding the concept and values of food security also requires a lifelong learning approach that is knowledge based, situated in authentic contexts and experiential, and takes into account social and cultural differences. Cues, which take the local social context into consideration, situated in the environment could be used as a mechanism to raise awareness, to re-define people's relationship with food and to encourage changes in behaviour related to food choices.

The formal education system needs to develop a broader and deeper curriculum focus on topics related to food security. Informal education institutions, such as botanic gardens and museums, have the potential to become a trustworthy platform for supporting sustainable food choices with a wide range of audiences.



#### Quotes

<sup>66</sup>But nevertheless we start with the children now and we do not even reach all - and what do you do with those who are no longer in school, that's the larger share, the more money-bearing share and I find that extremely difficult to convey.<sup>99</sup>

#### Participant in Vienna, Austria

<sup>66</sup>...visiting the Botanical Garden and seeing the pear labelled as strange food, it was a bit weird...this is part of the things that remind me about my childhood and one of my favourite food memories.<sup>99</sup>

**Participant in Meise, Belgium** 

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## **BigPicnic policy brief 5:** Using participatory approaches

#### **BIGPICNIC TOPIC**



#### **FOOD 2030 PRIORITIES**



**SDGs** 



**Development Goals** 

### Recommendations

Overall: Use participatory approaches to raise unheard voices and broaden our perception of expertise.

- Build new knowledge and create value, for all concerned, through open and inclusive research and public engagement processes.
- Involve the larger 'eco-system' (e.g. audiences, green organisations, researchers and industry) to allow all key players to work together.
- Leave your site to get easier access to and build relationships with new audiences. Don't expect them to come to you.
- Focus on creating strong, lasting relationships with a deeper, more sophisticated, engagement rather than on reaching more people.
- Open up the research process and co-create across the organisation to build a knowledge base, foster ownership of a topic, gain support for projects and create leverage for the results.

#### Background

Working towards a food secure, sustainable future and achieving all of the Food 2030 priorities and United Nations Sustainable Development Goals (SDGs) requires cross sectoral collaboration which includes the involvement of the public and community groups. Informal learning sites are uniquely placed to act as hubs to bring stakeholders together to discuss, set research priorities and design a sustainable future.

Informal learning sites have access to scientific and other expertise and have skills in bringing people together to learn and experience. Thus it is important that these spaces, like botanic gardens, respond to their mandate for developing a neutral space for dialogue to increase knowledge and inform policy. Achieving this requires a participatory approach to research, public engagement and project development.



#### **Findings**

Through the dialogues supported by the exhibitions and participatory events co-created as part of BigPicnic, the Partners have highlighted the potential for informal learning sites to foster multi-stakeholder collaboration. Participants highlighted that food security has a political dimension which links to other policy domains and that there are hidden topics, such as affordability of food, packaging, health and chronic diseases that need to be considered. Project Partners found that the public is keen to be involved in setting research priorities and in decisionmaking about food issues.

People engaged stressed the importance of food in relation to memory and the expression of national identity. Accessing and preserving knowledge from local actors was also valued along with the opportunity to construct and co-create knowledge. BigPicnic Partners found that food stories were able to bring people together, trigger recognition and create actionable perspectives in visitors. Co-creation was found to change the relationship of audiences to the topic. In addition, attitude change towards food and food security topics were also observed in the public and professionals that participated.

Co-creation creates value on multiple levels, it does not necessarily lead to predictable results - freedom, creativity, flexibility and, above all, perserverence need to be part of the process. Participatory engagement in BigPicnic (applied research and co-creation activities) helped to level playing fields between those who we traditionally consider to be experts and those who hold different, important forms of knowledge. Project Partners found that it is important to acknowledge, whether financially, or otherwise, the important contribution that each actor makes. The combination of Team-Based Inquiry (a participatory approach to applied research) and co-creation used in BigPicnic were deemed to be highly complementary approaches which reflect the ethos of Responsible Research and Innovation and supported Partners to enhance their project outcomes and capture the conversations raised by them.

Quote

## "Co-creation, even more participation"

I had not reflected on the possibility of planning cultural events, educational strategies, and hypotheses of institutional development directly with the recipients before. Yet it might seem like a logical process, but before the BigPicnic project this had happened just by chance. It was a discovery, intentionally putting people around a table who will then benefit from the proposals of the Botanical Garden, to feel their opinions not after having organised an exhibition or another event, but even before having conceived it.

Co-creation processes led to several installations within a mobile exhibition on secure, responsible and biodiverse food, but also to the adoption of our tropical plants in pots for the winter season by schools because our greenhouse is too small and more.

It's like cooking not for your guests but with your guests. This allows you to find out what their tastes are, their skills and preferences, and to share yours. You make them feel more protagonists, even if the ingredients, the house, the appliances make them dependent on you. It is different if you prepare everything yourself, imagining what their tastes may be, or how to prepare the table or dishes. This is more comfortable and maybe faster, but co-creation is more creative, participatory, socializing. It is not necessarily that everything always works perfectly, but it also offers surprises and solutions that you could not have imagined.

Gabriele Rinaldi, Director, Bergamo Botanic Garden

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## BigPicnic policy brief 6: Organisational development through food security

#### **BIGPICNIC TOPIC**



#### FOOD 2030 PRIORITIES



SDGs



United Nations Sustainable Development Goals

### **Recommendations**

Overall: Organisations should embrace new approaches and draw on a broad spectrum of expertise as catalysts for change.

- Build and/or strengthen relationships with national and international networks, acknowledging the strategic advantage these relationships offer.
- Empower curators and education staff to work more regularly and directly with local communities through support, resources and training.
- Embed participatory research and development approaches such as co-creation, science cafés and Team-Based Inquiry across the organisation, to identify and explore new subjects, respond to relevant issues/demands and strengthen internal and external relationships.
- Strategies to maintain momentum and encourage legacy (of projects, knowledge and relationships) should be considered throughout and beyond individual projects.

#### Background

Organisational-development thinking provides management and staff with the ability to introduce change systematically, by applying a broad selection of techniques and methodologies. This, in turn, leads to greater personal, group, and organisational effectiveness.

However, organisational change can be a challenge as it requires investment in new approaches and new skills and the support through internal and external mechanisms. BigPicnic provided informal learning settings (botanic gardens) with an opportunity to trial new approaches (co-creation, Team-Based Inquiry and Responsible Research and Innovation) to engage with new and diverse audiences on the subject of food security. This allowed botanic gardens to look at how they work with their local communities, reflect upon how these links can be strengthened through new, innovative approaches and consider the benefits these can bring to the organisation itself.

#### Findings

Within BigPicnic, botanic gardens acted as an inclusive space, or hub, for dialogue around food security, encouraging and facilitating discussion across different stakeholders to inform policy and strengthen (or create) relationships between different societal actors. New approaches, new audiences and the topic of food security were used to develop the organisations' conservation and education offer and build expertise and stakeholder support mechanisms.

In addition to new community audiences, the Partners established local Food Security Advisory Groups made up of local experts from policy, industry, food production and civil society. These groups helped the organisation to co-create their food security goals and ensure these were relevant to the needs of the organisation and the local context. Challenges to organisational development included the hiring of new staff for a limited time (just for the duration of the project) which can lead to new skills, knowledge and relationships being lost. In addition, aspects such as the general openness for change, the age and history of the organisation or the structure/hierarchy of staff can also be important factors to consider and address if change is to happen. The ability to link to various disciplines or external stakeholders to utilise knowledge and expertise or collaborate beyond organisational boundaries are also important considerations for institutional change. These can be challenging, particularly for smaller organisations with limited institutional links and networks.

Some Partners in the project used BigPicnic's approaches (e.g. co-creation) and events (e.g. science cafés) internally with staff from their own organisations as well as with new external audiences. Internal co-creation was shown to be an extremely valuable exercise which resulted in better communication across departments, a deeper understanding of the project's objectives and a wider support network for the project leaders to draw upon. From these co-creation sessions, topics for science cafés were developed, thereby bringing in the interests and expertise of different actors and stakeholders to the project.

#### Conclusion

Informal learning sites (including botanic gardens) are centres of knowledge and expertise and have an important role to play as inclusive educational hubs within their local communities. Understanding this role can be key to an organisation's development.

The value of networks should be recognised. Having direct contact with relevant organisations, groups or individuals is a strategic advantage for building knowledge and resilience. The ability to communicate with local people about local problems is invaluable for responsible research and education.

Participatory approaches such as co-creation can support organisational development and lead to new opportunities in unexplored or unexpected topics, fields of work or partnerships.



#### Quotes

"The results have been amazing. You will indeed be surprised by how much you can take out of a co-creation session and by how people you never expected could add value to your work. Co-creation really gives you a parallel view and an understanding of what people expect and need. So making them part of the design process is definitely inspiring and enriching. "

#### Elena, The Royal Botanic Garden of Madrid

"We also co-created with the staff of our Garden, organising Garden breakfasts and a co-creation session to choose the themes and locations of our science cafés. This allowed us to get to know each other better, and try to break through the staff hierarchy. This also meant our staff gave us feedback and their opinions on the activities we were doing in the project, and as a result they were more interested in the project. However, as the organisers of these breakfasts, we always felt it was us, directing the co-creation, steering our colleagues into what we thought they should be saying and thinking."

Izabella, University of Warsaw Botanic Garden

# **Big**Picnic

The full set of BigPicnic policy briefs is available on our website



## **BigPicnic**

### **Project partners**

The BigPicnic partnership is made up of 19 partners (18 in Europe and 1 in Africa) including botanic gardens, universities, a science shop, an institute for art, science and technology, and an international NGO.

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This project has received funding from the European Commission under the Horizon 2020 – Work Programme 2014 - 2015 Science with and for Society, Grant Agreement number 710780. Front cover images: top - Caroline Attwood, bottom - Kamil Zielinski. Design: www.seascapedesign.co.uk