Green Ideas: A Social Generator of Green Solutions, Deconstructed

Nikos Palavitsinis, Angeliki Papageorgiou, Laura Gavrilut, Vassilis Protonotarios [1]

[1] Agro-Know Technologies,
Grammou 17, Vrilissia, Athens, Greece
{palavitsinis; angeliki; lgavrilut; vprot}@agroknow.gr

ABSTRACT

On a global scale, environmental challenges are forcing local communities to re-think ways of interacting with the environment. Environmental problems present themselves in various forms and call for a profound change in the way we perceive the environment around us. To tackle them, new ways of approaching them have to be deployed, gathering around the same table, environmental experts, citizens, scientists of the environmental field as well as others from various background such as information science or economics. Green Ideas events provide the process with which these people will be able to meet in a lively setting that fosters creativity and innovation. This paper will outline the process on which Green Ideas is based and analyze the basic requirements for carrying out similar events that address carefully selected and articulated "design goals", related to green topics. The paper will also showcase results from the successful completion of previous Green Ideas events and discuss ways in which these ideas can be transferred from design to implementation in real-life settings. The main contribution of this paper is the presentation of a tested methodology that can help in addressing a series of different problems in any field, customized to fit environmental cases.

Keywords: Brainstorming, Workshop, Event, Ideas, Environment, Agriculture, Method

1.   INTRODUCTION

Green Ideas Project (http://greenideasproject.com/) is a series of engaging and interactive events that explore ways in which green innovation may be empowered by education and technology. The idea of organizing such an event started in 2011 and was realized some months later with the organization of Green Ideas 2011 in Chios, Greece. Up to today, another two versions of Green Ideas have been organized, one in Pollenzo, Italy (2012) and one in Heraklion, Crete (2013). Green Ideas events attract people from different backgrounds and combine them into groups that work collectively towards common problems or "goals" as they are termed in the context of the events. Ranging from scientists of the agricultural domain, researchers of natural history, teachers, computer scientists and statisticians to concerned parents and citizens in general, Green

Ideas brings together all these different stakeholders and uses their collective creativity as a generator of ideas on environmental topics. To this end, English has been selected as the official language of this kind of events, in order to better accommodate the needs of both the speakers and the participants with different countries of origin. Green Ideas events are designed and executed on a local level, taking into account environmental problems and opportunities that occur in the regions that host them each year, but in parallel they aim at generating solutions and ideas that can be scaled up and applied on a global level all around the world. The methodology followed in these events is based in years-long research outcomes on group dynamics and brainstorming (Jablin, 1981; VanGundy, 1988; Richardson & Andersen, 1995; Andersen & Richardson, 1997; Vennix, 1999) and is customized to fit the needs of each specific goal that the event tries to solve but its backbone is comprised of a set of brainstorming and team-building techniques that contribute to its overall success and unique nature. This paper will present the Green Ideas format, describing the overall architecture of the events and will showcase a couple of previous events along with their outcomes.

The main contribution of this paper lies in the fact that it presents a tested methodology that can help in addressing a series of different problems in any field. The methodology presented will also be adapted to fit different contexts and needs so that any individual or institution that wants to deploy it has all the necessary information and parameters to do so. The paper is structured as follows: Chapter 2 presents an overview of the methodology followed in each Green Ideas event, along with the tools and the roles of the people involved. Chapter 3 presents the outcomes of Green Ideas events organized so far, focusing on the projects developed. Chapter 4 contains some practical considerations for organizing Green Ideas events along with a short discussion on the need for organizing such events involving the wider environmental community.

2. METHODOLOGY

The Green Idea Methodology consists of four specific stages through which the participants of each event work, to come one step closer at a time, to their goal, that is set forth in the beginning of the event. Setting a goal for each event is of paramount importance as this is the guiding beacon for all the work carried out during the event. Depending on the problems and/or opportunities of the region where Green Ideas is organized each time, the goals set forth, have to be aligned to them, so that Green Ideas' participants are working in the right context. Having a goal (or more than one) in mind, the rest of the phases that a typical Green Ideas event deploys, are the following:

- **Harvest Requirements**: During this phase, the participants draw upon the experience of professionals and invited experts by interviewing them in relation to the goal(s) of the event. Their purpose is to take notes related to the success stories being narrated in front of them and the experiences of the invited guests so that they can use them in the next phases of the event.

- **Plant Seeds**: During this stage, the participants share their ideas with one another on a common space so that each group member can see what the other participants took out of the interviews. After the sharing process, meaning that the first "idea seeds" are planted, the participants revisit their notes, adding new ideas on them, or elaborating more on the ones that inspire them. After building on the ideas generated, the participants formulate concrete ideas that can then be developed further. For this phase to be considered completed, each group of participants has to have one or two ideas that will be then "cultivated" and modeled into a coherent story.

- **Cultivate Ideas**: During this phase, the participants have a really specific idea that they want to develop (i.e. cultivate) further. Starting from this idea, they describe it as clearly as possible, identifying a title and a description and then they model it into a coherent story, by using modeling material such as scissors, clay, paper, glue, rope, etc. and in general whatever they can find so that they can prepare a 3D model of their idea. Once all the models are prepared, each group presents their project/idea to the rest.

- **Blossom & Thrive**: During the last phase of Green Ideas, the participants have to prove that their ideas are sustainable and that there is a concrete plan of following them through to real-life implementation. Looking at their models again, they are now called to come up with a tentative schedule that will guide their deployment in real-life situations. To make the scenario more realistic, each group has to also identify and describe a value proposition behind their idea, identifying their target audience and market that would be willing to finance their effort.

2.1 Tools

In every Green Ideas event, a set of tools that are customized for these events is deployed. In the following paragraphs, these tools are briefly described.

2.1.1 Interview

One of the most important parts for the success of a Green Ideas event is the interview part where the participants "harvest" experiences and stories in order to collect input for their projects. In this part, external guests are introduced in the groups, so that the participants can discuss with them. Although this seems simple, it's a process that requires lots of planning and preparation on the side of the interviewee as well, as he/she has to be coached related to the goals set forth, so that he/she can provide the most relevant information when asked by the participants. Continuous monitoring of the process is also needed so that no participant dominates the group by being the one asking all the questions but also to make sure that the interviewee does not go in great lengths on his/her personal views instead of answering the questions quickly and accurately.

2.1.2 Inspiring Talks

Apart from the interviews conducted, each one of the phases described above, hosts one or more inspiring talks from invited speakers that get a maximum of ten minutes to present their work/interests related to the respective phase of the event. For example, in the case of the "Plant Seeds" phase, an invited speaker will elaborate on how he/she designed an idea that he/she put into action, elaborating on how he/she came up with the idea, how it was developed into the final idea, starting from an initial concept, etc. This will help the participants relate to the process of generating ideas that are then elaborated and refined into something concrete that can be moved into the modeling phase of "Cultivating Ideas". Another example of this would be a speaker for the "Blossom & Thrive" phase that has deployed his idea on a large scale and has already identified business models to make it sustainable. This will also inspire the participants to work on their own projects.

2.1.3 Brainstorming Techniques

Once the participants have collected all the information needed through the interview, time has come to share their views on what was discussed. During this part it's essential to use brainstorming techniques like the ones presented by Alex Faickney Osborn in the 1953 book Applied Imagination. More specifically, in Green Ideas, every participant has continuous access to writing material so that all ideas and thoughts are recorded. Some of the rules that were introduced by Osborn that are followed in Green Ideas are the following:

- **Focus on quantity**: This rule is a means that the greater the number of ideas generated, the greater the chance of producing a radical and effective solution.

- **Withhold criticism**: In brainstorming, criticism of ideas generated should be put 'on hold'. Instead, participants should focus on extending or adding to ideas, reserving criticism for a later 'critical stage' of the process. By suspending judgment, participants will feel free to generate unusual ideas.

- **Welcome unusual ideas**: To get a good and long list of ideas, unusual ideas are welcomed. They can be generated by looking from new perspectives and suspending assumptions. These new ways of thinking may provide better solutions.

- **Combine and improve ideas**: Good ideas may be combined to form a single better good idea, as suggested by the slogan "1+1=3". It is believed to stimulate the building of ideas by a process of association.

2.1.4 Team Building Activities

Green Ideas brings together a really diverse mix of participants from various backgrounds that usually do not know each other in advance. This characteristic

P0099
Palavitsinis N., Papageorgiou, A., Gavrilut, L. & Vassilis Protonotarios. "Green Ideas: A Social Generator of Green Solutions, Deconstructed". EFITA-WCCA-CIGR Conference "Sustainable Agriculture through ICT Innovation", Turin, Italy, 24-27 June 2013.

2013 Conference
June 23-27, 2013
TORINO, ITALY

EFITA
WCCA
CIGR

Sustainable Agriculture through ICT innovation

requires ways that can shorten the time that a participant needs to adapt to the group he/she is assigned to. Most of the time, people are reluctant to open up and express their ideas when confronted by people they do not know, so the need of exercises and games that can make them feel more open are necessary. In this part, well-known and widely used team building exercises are used, keeping in mind the language barrier between the participants, since in each event more than ten different countries/languages are usually represented.

2.2 Roles

Green Ideas is an event that needs a minimum crew of people so that it can be run effectively. The roles needed for each Green Ideas event, from the preparation and planning stage, until the actual event, are the following:

- **Format Expert**: This person is in charge of planning the whole event in terms of the goals that are set forth, the program and the coaching of the people that are involved in the four phases of a Green Ideas event. It is essential that this person has significant experience in similar events,

- **Event Manager**: This person is in charge of the whole event, both in terms of planning practical and housekeeping details before the event (logistics, transportation, invitations, publicity, etc.) as well as making sure that the event runs smoothly when it takes place, keeping the time and managing the non-scientific part of Green Ideas,

- **Facilitator**: This person is an expert in facilitating the work carried out within the groups and his/her main task is connected to the duration of the event. This person has to have specific skills related to brainstorming techniques and team-building exercises but it is also crucial to have a working knowledge of the environmental domain or the specific goal that is set forth in the group that he/she facilitates,

- **Speaker**: A speaker in Green Ideas has to have an interesting story to say, be really extrovert and eloquent in expressing his/her opinion so that the audience can really be inspired by the story presented. A really good speaker is of paramount importance and can influence the work carried out in Green Ideas in a profound way,

- **Interviewee**: Similarly to any speaker, the interviewee has to have good communication skills and a good knowledge of English so that he/she can effectively communicate with all the participants during the interview. The ability to express his/her opinion clearly and precisely in a short amount of time are also desirable traits for such a person,

2013 Conference

June 23-27, 2013
TORINO, ITALY

EFITA
WCCA
CIGR

Sustainable Agriculture through ICT innovation

- **Local Organizer**: As in every event, Green Ideas is also in need of a local organizer with a good knowledge of the local community and region so that connections to important stakeholders can be made but also any emergencies can be handled effectively and immediately.

3. OUTCOMES

So far, two events of the Green Ideas series have been completed and another one is in progress at the time that this paper is prepared. The next chapter presents the main outcomes of these events in the form of the models presented by the respective groups.

3.1 Green Ideas 2011

In Green Ideas 2011 a total number of 26 participants from 12 countries formed two groups that worked on the following goal:

How might we create collaboration opportunities for communities to share green knowledge?

The models prepared were the following:

Group 1 - http://wiki.agroknow.gr/agroknow/index.php/Cohort_1
Title: Slidea
Description: Slide + Idea = Slidea. To create a coffe shop where people discuss agricultural problems and they try to find solutions for the most urgent and important issues.

Figure 1. Slidea & Green Dream Team models

P0099
Palavitsinis N., Papageorgiou, A., Gavrilut, L. & Vassilis Protonotarios. "Green Ideas: A Social Generator of Green Solutions, Deconstructed". EFITA-WCCA-CIGR Conference "Sustainable Agriculture through ICT Innovation", Turin, Italy, 24-27 June 2013.

Group 2 - http://wiki.agroknow.gr/agroknow/index.php/Cohort_2
Title: Green Dream Team project
Description: To create a green network of organic food starting from the farmers and ending with the final consumer.

3.2 Green Ideas 2012
In Green Ideas 2012 a total number of 20 participants from 8 countries formed two groups that worked on the following goals:

- *How might we use e-learning resources in an innovative way to educate children in making more environmentally friendly choices?*

- *How might we create a system for communities to collect, store, and use their ancestors' food wisdom in solving todays' food challenges?*

The models prepared were the following:

Group 1 - http://wiki.agroknow.gr/agroknow/index.php/Pink_cohort
Title: Cookid!
Description: Cookid connects children with local communities, helps them to make decisions on healthy food choices and exposes them to food production experiences.

Figure 2. Cookid! & GEMS-it! models

Group 2 - http://wiki.agroknow.gr/agroknow/index.php/Yellow_cohort
Title: GEMS - it! Grow it, Eat it, Make it, Share it!
Description: The 5C's. *Canteen* - a meeting point centered around the love of food, *Community* - a common meeting point for all ages, professions and interests, *Collaborate* - a cooperative approach to learning through actions, *Communication* - a

P0099
Palavitsinis N., Papageorgiou, A., Gavrilut, L. & Vassilis Protonotarios. "Green Ideas: A Social Generator of Green Solutions, Deconstructed". EFITA-WCCA-CIGR Conference "Sustainable Agriculture through ICT Innovation", Turin, Italy, 24-27 June 2013.

2013 Conference

June 23-27, 2013
TORINO, ITALY

EFITA
WCCA
CIGR

Sustainable Agriculture through ICT innovation

methodology for solving today's food challenges, *Connection* - a way of connecting elderly and children to a sustainable food culture.

The respective videos that the teams created are presented in the respective wiki pages that are provided above. Also, additional information on the background of their work is presented, listing the notes of the participants in the respective phases of Green Ideas.

4. CONCLUSIONS

Green Ideas serves as a means to identifying innovative, ground-breaking ideas that address burning environmental issues both locally and on a global scale. Results from the events organized so far, are far from encouraging while one of them have evolved into a full-fledged initiative, namely the Green Learning Network (http://voa3r.cc.uah.es/index.php/groups/viewgroup/13-Green+Learning+Network) that aims to become a virtual space of reference for sharing and reusing green ideas, knowledge and resources and thus to facilitate the creation of liaisons and establishment of collaborations among different groups sharing common objectives. Nevertheless, organizing a similar event successfully and reaping the respective results requires serious planning and professional execution of each event. Carefully selecting the participants, the speakers and the interviewees, ensures that a brilliant group of individuals will work in the heart of the event to realize its goals. Even before that, looking at the real needs of the environment and the communities involved helps in identifying the goals that are set forth in each event so that they are relevant, inspiring and at the same time tangible for the participants to tackle. Through this paper, Green Ideas is expanding its scope, opening up its format to interested stakeholders that aim to organize similar events in their region/country so that the overall goal of the event, that is the generation of green solutions for environmental problems, is accomplished.

5. REFERENCES

Andersen DF, Richardson GP. (1997). Scripts for group model-building. System Dynamics Review 13(2): 107-129

Jablin, F. M. (1981). Cultivating imagination: Factors that enhance and inhibit creativity in brainstorming groups. Human Communication Research, 7, 245-258

Richardson, G. P. and D. F. Andersen. (1995). Teamwork in Group Model Building. System Dynamics Review 11(2): 113–137

VanGundy, A. B. (1988). Techniques of Structured Problem Solving, 2nd edition, Van Nostrand Reinhold Company, New York, NY

Vennix, J. (1999). Group model-building: tackling messy problems. System Dynamics Review 15:379-401