Teaching inputs

Ideas and master copies to accompany the documentary film
Voices of Transition

by Nils Aguilar, 66 minutes, suitable for age 16 and older

**Topic:** Agriculture, nutrition, consumption, social change, sustainable development

**Age Group:** For secondary school students from age 16, young people in vocational training, adult learner

**Production:** Nils Aguilar, Milpafilms / Germany, France 2012

**Camera:** Jérôme Polidor

**Editing:** Nicolas Servide, Nils Aguilar

**Music:** Elischa Kaminer

**Sound:** Jérôme Polidor

**Languages:** Languages: French-English-Spanish [orig.]

**Subtitles:** English, French, German, Spanish, Japanese, Chinese (Mandarin), Portuguese, Italian, Dutch, Romanian, Croatian, Polish, Korean, Turkish, Czech, Catalan
Content
The documentary film “Voices of Transition” looks at different forms of agriculture and food production. The film takes as its starting point the adverse impacts of today’s globalised agricultural industry and highlights alternative approaches better suited to ensuring the long-term future of agriculture. It enables the key protagonists of social and ecological change to describe their activities in their own words and presents innovative ideas for meeting the challenges of climate change, resource scarcity and food crises. Using examples from France, England and Cuba, the three-part film provides an introduction to issues such as agroforestry, permaculture, Transition initiatives, agro-ecology and urban organic farming. Its focus throughout is on the future prospects for food production: How can the world’s population be fed in the future? At the same time, the film encourages viewers to reflect on their own consumption habits and to take an active part in working towards a sustainable future.

About the film
In keeping with the United Nations “2014 International Year of Family Farming”, the film “Voices of Transition” offers some exciting, stimulating and provocative ideas and opinions about farming and agriculture. Divided into three well thought-out sections, this informative film showcases a wide range of potential strategies and practical options for action. It may also trigger “allergic” responses, though – for some people, the protagonists may come across as off-the-wall ideologues or weirdo sectarians. This aspect of the film can be addressed explicitly with learners as part of a process of critical reflection about stereotypes and preconceived ideas of ecological activism. First and foremost, however, the film is designed to convey a positive overall message about sustainability and to prompt viewers to reflect on their own consumer behaviour. The large amount of information conveyed by the commentary and by experts who appear in the film makes it challenging to analyse, but the film loses none of its interest as a result. Attention should be focused squarely on the issue of “sustainable agriculture”, and a clear distinction should be drawn between small-scale (market garden) growing and large-scale agricultural production.

Background
Education for Sustainable Development (ESD)
By linking together ecological, economic and social issues with the topic of agriculture/food production, the film is very well suited for use as part of educational programmes dealing with sustainable development. Different thematic ways of approaching the topic are mentioned, including issues to do with the environment, society, health and the economy. The film’s provocative arguments serve to foster sustainability-related skills such as joined-up thinking, critical judgment and working out potential responses.

Transition movement
Since 2006 environmental and sustainability initiatives have sprung up in many towns, cities and communities throughout the world in the context of the Transition movement, aimed at actively shaping an intentional transition to a post-carbon, re-localised economy. The movement was originally initiated by English permaculture activist Rob Hopkins and students at the Kinsale Further Education College in Ireland.

www.transitionnetwork.org  www.voicesoftransition.org/en
Permaculture
The word “permaculture” is derived from “permanent agriculture” and refers to a system for creating and designing sustainable forms of habitation for human beings. It was developed during the 1970s by pioneers David Holmgren and Bill Mollison from Australia. The latter was awarded the 1981 Alternative Nobel Prize for his work.
The following elements are characteristic of permaculture: small-scale land use; areas that are cultivated using methods of varying intensity (from highly intensive cultivation through to uncultivated wilderness); high ecological and biological diversity; use of native and foreign wild and cultivated plants and animals; multifunctional elements (e.g. a sheep will keep meadow grass ‘cut’ and also fertilize it while providing milk, meat and wool); the emphasis is on maintaining positive relationships and connections between the different elements; perennial cultures and low maintenance permanent solutions are preferred.
www.permaculture.org.uk

Key concepts presented in the film

Green Revolution
A series of technology transfer initiatives started during the 1960s – since then heavily contested – involving the development of high performance, high yield crop varieties and their dissemination in so-called ‘developing countries’.
http://en.wikipedia.org/wiki/Green_Revolution

WTO (World Trade Organization)
An international organisation comprising 157 member states, aimed at increasing trade in goods and services as a means of raising living standards.
https://www.wto.org/

Resilience
The capacity of a system or organism to withstand shocks and to cope with change. For an ecosystem, this means being able to maintain its fundamental mode of organisation in the face of ecological disturbances.

Urban gardening, urban farming
Usually small-scale, horticultural use of urban spaces within residential areas or very nearby. Sustainable cultivation, environmentally sound production and conscious consumption of the agricultural produce.
http://incredibleediblenetwork.org.uk/

Peak-Oil
Refers to the moment at which the maximum rate of oil extraction is reached worldwide. Experts are divided on when this point in time actually is (or was).
http://en.wikipedia.org/wiki/Peak_oil
Biodiversity
Refers to the diversity of ecosystems (habitats such as water, forests, Alpine areas), species (animals, plants, fungi, micro-organisms) and genes (races or varieties of wild and useful species). These are closely interrelated to one another.
http://en.wikipedia.org/wiki/Biodiversity

Forest garden
Everything necessary for daily living is produced on a small parcel of land: food, animal feed, medicines, wood for heating and building. Forest gardens are sustainable over the long term and maintain soil fertility. The prime example of a forest garden is the tropical rainforest.
http://en.wikipedia.org/wiki/Forest_gardening

Target audience
Secondary school students from age 16, adult education (can also be used in vocational training contexts, given a suitable range of methods and topics)

Relevance to the curriculum
The main themes of the film – agriculture, food and consumption – can be addressed in the following subjects: geography, biology, domestic science, economics and politics. They are also good interdisciplinary topics and can be addressed in the context of general studies.
Reflective discussion about values, about shaping the future and about social change can be integrated into the subject area of “ethics and society”.

Skills
The activities suggested below can help students to acquire various general skills, including self-reflection (exploring my own views on food and consumption), critical reflection (comparing and contrasting different forms of agriculture), changing perspectives (putting myself in someone else’s position), debating values (comparing and contrasting my own and others’ values and taking a critical look at both), participation and social engagement, methodological skills (research, collaboration).

Learning objectives
Students...
- think about and discuss issues to do with future food security in the face of a growing global population;
- are able to look at developments and trends in agricultural and industrial food production from the perspective of different actors and to compare and evaluate them;
- are able to think about the influence that consumers have on the world of work and modes of production and to develop possible practical responses that reflect shared personal and social responsibility;
- are able to devise, discuss and work on practical responses as a contribution toward global food security;
- recognise ecological, economic and social issues to do with agriculture and food production;
• articulate creative ideas for a sustainable model of agriculture in their own country.

### Overview of worksheets and master copies

<table>
<thead>
<tr>
<th>Worksheet 1</th>
<th>Forms of sustainable agriculture</th>
</tr>
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<tbody>
<tr>
<td>Worksheet 2</td>
<td>A sustainable model of agriculture for your country</td>
</tr>
<tr>
<td>Worksheet 3</td>
<td>Expert debate on “Agriculture between utopia and reality”</td>
</tr>
</tbody>
</table>

### Sections of film

The film is divided into three sections:

<table>
<thead>
<tr>
<th>Section</th>
<th>Duration</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Min. 0 – 18</td>
<td>Agroforestry and permaculture (Frankreich)</td>
</tr>
<tr>
<td>2</td>
<td>Min. 18 – 50</td>
<td>Transition Town movement (UK)</td>
</tr>
<tr>
<td>3</td>
<td>Min. 50 – 64</td>
<td>Agro-ecology and urban organic farming (Cuba)</td>
</tr>
</tbody>
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### TEACHING INPUTS

#### Preliminary comments

The large amount of information contained in the film together with the complex topic of sustainable agriculture requires a well thought-out approach:

1. **Step:** Sharing first impressions and opinions about the film (getting started)
2. **Step:** Understanding the information, asking questions, researching and analysing (Input 1)
3. **Step:** Discussing, debating, disputing, and devising possible practical responses for the future (Input 2)

It may be that the students perceive the film’s protagonists as “weirdos” who merely confirm their stereotypical image of the environmental movement. If responses like this emerge, it is important to respond to them and to question everyone’s preconceptions and stereotypes.

#### Before showing the film

- Students should note down briefly their own connection to agriculture and food (working on their own).
- In the whole group, explain the key catchwords to aid better understanding of the film (e.g. permaculture, Transition town initiatives, resilience ...).
- Observation tasks: divide the class into four groups for the work to be done under Inputs 1 and 2. Each group watches out for one of the following themes during the film: environment, economics, health, society (perhaps noting down the main points).

#### Watching the film

- Start the film running and pause it after the quote by Vandana Shiva (00:18 – 01:20). Physicist Dr. Vandana Shiva from India has received many awards for her work in environmental conservation, biodiversity, women’s rights and sustainability. «The real cause of the rise in food prices is the forced globalisation of local markets in the interest of speculative monopolies. This has been funded by the World Bank’s package of one billion dollars. This package funds new seeds designed to die after one season and seeds for monocultures and fertilisers. This is a disaster for poor...»
countries. The farmers get into debt and must sell their produce so cheaply that they can’t even afford to buy food with the money. Furthermore, 25% of climate change is caused by industrial agriculture and 10% by the unnecessary transport of food. That means 40% of greenhouse gases are caused by our unsustainable farming system. We could solve both the climate problem and the food problem tomorrow by supporting ecological agriculture and local economies.

- Ask the students to give their responses; then continue with the film.

Analysing the film

Getting started

- Individual work: Working in silence, students use coloured pens and a large sheet of paper to express their own response to the film in the form of drawings or questions (symbols, words etc.).
- As a class: Students talk to one another about the images and words they have produced. If they see the film’s protagonists as “weirdos” that confirm a certain stereotypical image of the environmental movement, this can briefly be talked about explicitly.

**INPUT 1 – FORMS OF SUSTAINABLE AGRICULTURE**

The four groups, formed prior to the film, research and analyse one of the following topics using the notes they made during the film and the text quotes on Worksheet 1: Environment, agriculture, economy, health, society. Objective: To familiarise themselves with the issue sufficiently so that the group is able briefly to present its topic in an “expert debate” and put forward arguments about it in a discussion.

One way of doing this could be as follows:
- Make a list of the key words associated with the topic that were noted down during the film.
- Look at the quotes from the film presented on Worksheet 1 and, where necessary, clarify their meaning.
- Share any questions about the topic and conduct research on the internet to find additional information.
- Put together a short 5 minute presentation on the topic. Quotes, pictures, graphics or, better still, the students’ own sketches, can be used for this.

Content-related criteria for internet research

- How is my topic presented in the film overall (e.g. people’s health in relation to the different farming methods).
- What role does each model of agriculture (or vegetable growing) play in relation to my topic? For example, permaculture in relation to the environment, or Transition initiatives in relation to society etc.
- What does the term “sustainability” mean in the film in relation to my topic?
- What roles do people (e.g. consumers) play in the film in relation to my topic? (Are they organised as a group in any way? Do they do things for the environment? What does their health mean to them? Do they themselves farm?)
- Etc.
Final preparations for the expert debate
• Nominate a spokesperson from the group who will give the short presentation.
• Prepare three questions to ask the other groups.

INPUT 2 – EXPERT DEBATE ON “AGRICULTURE BETWEEN UTOPIA AND REALITY”

Forming groups
Form new groups consisting of at least one representative from each of the previous groups. The new groups will again work on the topics dealt with in Input 1: Environment, economy, health, society. Two students who are good at speaking in front of groups can take on the task of facilitating the debate, keeping an eye on the time and making sure people keep to the topic at hand.

Short presentations
Each expert group presents its topic in a 5 minute presentation (ideally including quotes, images, graphics or drawings).

Discussion, part 1: Local and global agriculture
Some of the topics suggest themselves from the content-related criteria of Input 1. The following questions also arise, though:
• Can local initiatives like these feed everyone in the world?
• What are the limits to this kind of self-sufficiency?
• What kind of agriculture do we need in the future?
• What connections can we see between these issues and our behaviour as consumers?
• What values are important to us personally in relation to agriculture and food?
• Are the models shown in the film applicable to my own country?

Discussion, part 2: A sustainable model of agriculture for my country
To achieve a change in perspective the groups can be mixed up again for the second part of the discussion; at least one member of the previous group should stay in it. The two facilitators (who themselves have now changed) facilitate the discussion.
• Using the list on Worksheet 2 the four groups try to choose, from their own perspective (environment, economy, health, society), those which they consider to be important for a sustainable model of agriculture. The different pieces of the “jigsaw puzzle” can then be put together as a whole and a brief explanation prepared for presentation in the large group. Objective: The speakers should speak for just a short time and without notes if possible.
• Afterwards the discussion begins about the agriculture jigsaw puzzle. A number of issues could be talked about, including the following:
  • What role does shared responsibility play in sustainable agriculture?
  • How can shared responsibility and community-mindedness be rekindled in an individualised world?
  • How much civil disobedience might be needed to do this?
  • What role should biodiversity play?
Finally, the participants in the discussion could think of something practical they could do on the school premises relatively soon using simple means. For example:

- Create a school garden, plant vegetables and berry bushes, make food from the produce
- Plant a tree – suitable to the location – as a symbol of change and of the future
- Launch a campaign for sustainable consumption within the school
- Contact a nearby farm and set up a snack shop during break times using its produce, etc.

Option 1: Role play/debate (see diagram on Worksheet 3)
Two or three students take on a particular role, prepare themselves briefly for it and then try to convince the other groups about their views (e.g. as a Monsanto representative or as a Transition activist). The role players can switch roles during the debate, if they so wish, adopting a different perspective to see how it feels.

Option 2: “Taking a stand” game
A line is laid on the floor of the classroom using sticky tape. At one end there is a sheet with “I agree” written on it, at the other end a sheet saying “I disagree”. The teacher then reads out various statements (these may include polemical ones) to which the students are asked to respond by placing themselves at either end of the line or somewhere between the two positions. The teacher then calls upon the students to give reasons for where they stand. Students standing somewhere else on the line can respond and assert their own reasons for standing where they are.

Potential statements:
- Small-scale farmers could feed the world (70% of the world’s food is produced by small-scale farmers)
- Our lifestyle makes it necessary to have an industrialised, globalised form of agriculture
- The aim of agricultural policy should be to ensure there can be sustainable agriculture
- Everyone should grow their own vegetables
- The main thing the farmers in our country do is look after the countryside
- Conventional agriculture (that is, not organic agriculture) should be banned
- Food is much too cheap. Transport costs should be increased massively to prevent food being transported over very long distances
- We’re powerless in the face of the big agricultural corporations
- The Monsanto corporation is itself working towards achieving sustainable agriculture
- Etc.

Additional Links
http://voicesoftransition.org/ - official website of the film
http://www.transitionnetwork.org/ - non-profit organisation dedicated to promoting the Transition model
http://www.transitiontowntotnes.org/ - umbrella organisation of Transition Town Totnes
### TASK

- By doing a quick search of the internet try to question the truth (or otherwise) of the quotes from the film shown in the tables below and to find out the real reasons for the malaise in agriculture. Bear in mind what you found out about your own topic (environment, economy, health, society).
- Write a short talk (5 minutes) on the issue. You can use quotes, pictures, graphics or, better still, your own sketches for this.
- The teacher will let you know the criteria for your quick internet search and for preparing and conducting the expert debate.

### QUOTES FROM THE FILM COMMENTARY

#### 1. Agroforestry, permaculture (France)

<table>
<thead>
<tr>
<th>Time</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>06.30</td>
<td>&quot;Today, three biotech giants control more than 50% of the commercial seed market. Their business model: patenting living beings and licensing non-renewable seeds.&quot;</td>
</tr>
<tr>
<td>07.19</td>
<td>&quot;Industrial agriculture (incl. processing and transportation) is responsible for 40% of greenhouse gases. To produce one single calorie, 10-20 are consumed. The costs for nature and society are enormous, but this system generates high returns for industry. Almost all subsidies and R&amp;D budgets are devoted to this agricultural model.&quot;</td>
</tr>
<tr>
<td>08.17</td>
<td>&quot;If trucks stopped running, supermarkets would be empty within three days.&quot;</td>
</tr>
<tr>
<td>10.51</td>
<td>&quot;85% of European subsidies are given to 17% of farmers: to those who are biggest and pollute most. These subsidies favour large farms and create rural unemployment. This public money ignores the environmental damage caused by monocultures and chemicals and fails to encourage crop diversification as the only way to guarantee biodiversity.&quot;</td>
</tr>
<tr>
<td>14.18</td>
<td>&quot;In France a farm closes every 23 minutes (Ministry for Agriculture, France). Young people find it ever harder to take over their parents' farms, which become more debt-ridden each year.&quot;</td>
</tr>
<tr>
<td>25.08</td>
<td>&quot;According to the UN, a 50% increase in income leads to a 60-80% increase in an individual's ecological footprint. Increased economic performance doesn't make the planet greener – quite the opposite.&quot;</td>
</tr>
</tbody>
</table>

#### 2. Transition Town initiatives (South of England)

<table>
<thead>
<tr>
<th>Time</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.16</td>
<td>&quot;With roots in the South of England, a new movement is sparking people's imaginations. Its aim: local resilience, fair economies and a better quality of life.&quot;</td>
</tr>
<tr>
<td>28.06</td>
<td>&quot;Transition projects around the world are telling new stories: about the town that prints its own money or turns the school car park into a garden - Totnes.&quot;</td>
</tr>
<tr>
<td>28.25</td>
<td>&quot;It started here in Totnes in 2005 with film screenings and talks. The following year we celebrated the 'unleashing' of 'Transition Town Totnes'. About 400 people attended the big launch. Different groups were then formed, focused around topics like food, energy, housing, medicine... [e.g. the Totnes pound, a local food directory, a 'garden-share' scheme, energy descent plan etc.]&quot;</td>
</tr>
<tr>
<td>29.20</td>
<td>&quot;We noticed that, through creative thinking, we came up with many new ideas. They all linked in with other great projects. It was an important process for everyone. They realised that becoming creative is essential for making a really good plan.&quot;</td>
</tr>
</tbody>
</table>
“We often think we have to be experts on everything. We must be experts on transport or on wind turbines to know what to do. Actually, as a community, we just need to say: ‘This is where we need to go.’ Then the experts can come in and simply adjust our plans.”

“If we consider climate change and peak oil together, we tend to think about re-localising things. We need to make our local communities more resilient, localise our food production and bring our jobs closer to home.”

See also the quote by Rob Hopkins on Worksheet 3

3. Agro-ecology, urban organic farming (Cuba)

“The World Trade Organization’s mission is incompatible with food sovereignty. The WTO system aims for total liberalisation of the markets and the elimination of import protection. In Cuba, the goal of food sovereignty arose out of sheer necessity, because of premature ‘peak oil’.”

“Exports and imports fell by 80% during the crisis. Without oil and chemical inputs the agro-industry was paralysed and famine was looming.”

“The city of Havana now produces 70% of the vegetables it needs, all organically.”

“Most state-run, Soviet-like farms were turned into small, self-run farms and began mixing crops and livestock, thus becoming more productive. From 2009 to 2010 more than 1 million hectares of idle land were given to Cuban citizens for food production.”

“On 28 acres of land the co-op has created 150 jobs and provides the neighbourhood with fresh, organic produce. Workers earn twice as much as the average Cuban salary.”

“The agro-ecological revolution has given Cubans more autonomy, but the decentralisation processes are slow and laborious: 40% of arable land still lies fallow.”
**WORKSHEET 2 – A SUSTAINABLE MODEL OF AGRICULTURE FOR [COUNTRY] (JIGSAW PUZZLE)**

Instructions
- The table below contains 60 words (“jigsaw puzzle pieces”). Select the key words linked to your topic and write each of them in large letters on a sheet of A4 paper.
- Each piece of the puzzle can be interpreted either positively or negatively.
- Fit together the words you have selected into a “jigsaw puzzle” that represents your vision of a sustainable model of agriculture for your country.
- Prepare a brief statement explaining how you have pieced the puzzle together, which you will present in the whole group discussion to follow. The idea is to speak for just a short time and without notes if possible.

<table>
<thead>
<tr>
<th>Advertising</th>
<th>EU</th>
<th>Peasant farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural policy</td>
<td>Farming closures</td>
<td>Permaculture</td>
</tr>
<tr>
<td>Animal-friendly livestock keeping</td>
<td>Family farms</td>
<td>Pesticides</td>
</tr>
<tr>
<td>Arable farming</td>
<td>Forest garden</td>
<td>Pests</td>
</tr>
<tr>
<td>Artificial fertiliser</td>
<td>Green revolution</td>
<td>Pricing pressure</td>
</tr>
<tr>
<td>Beneficial insects</td>
<td>Genetically modified seeds</td>
<td>Profitability</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>Healthy diet</td>
<td>Rural conservation</td>
</tr>
<tr>
<td>Box scheme</td>
<td>Imports</td>
<td>Seasonal produce</td>
</tr>
<tr>
<td>Cattle breeding</td>
<td>Insecticides</td>
<td>Self-sufficiency</td>
</tr>
<tr>
<td>Cheap products</td>
<td>Large-scale farmers</td>
<td>Small animal husbandry</td>
</tr>
<tr>
<td>Chemicals</td>
<td>Local production</td>
<td>Soil degradation</td>
</tr>
<tr>
<td>CO(_2) reduction</td>
<td>Mechanisation</td>
<td>Subsidies</td>
</tr>
<tr>
<td>Collaborative initiatives</td>
<td>Mixed cropping</td>
<td>Supermarket chains</td>
</tr>
<tr>
<td>Compost</td>
<td>Monoculture</td>
<td>Traditions</td>
</tr>
<tr>
<td>Consumer awareness</td>
<td>Oil dependency</td>
<td>Transition Town Initiatives</td>
</tr>
<tr>
<td>Convenience foods</td>
<td>Organic farming</td>
<td>Transportation</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>Organic labelling</td>
<td>Sustainability</td>
</tr>
<tr>
<td>Crop rotation</td>
<td>Organic vegetables in a box</td>
<td>Urban gardening</td>
</tr>
<tr>
<td>Customs</td>
<td>Participation</td>
<td>Wholesalers</td>
</tr>
<tr>
<td>Environmental protection</td>
<td>Peak oil</td>
<td>WTO</td>
</tr>
</tbody>
</table>

Explanation (3 – 5 points)
WORKSHEET 3 – EXPERT DEBATE “AGRICULTURE BETWEEN UTOPIA AND REALITY”

The key players in agriculture

Two quotes from Rob Hopkins, co-founder of the Transition movement

“We’re not doing this because we have to. We’re doing it because it nourishes us as human beings. It feels right.”

“We need to plan ahead now, to tackle the problems that lie ahead of us, such as peak oil, climate change and economic crises. If we don’t, we’re gone. If you keep thinking: ‘This is as good as it gets’ or ‘Our world is at the pinnacle of civilization’, it’s difficult to plan for a better world. Transition initiatives say ‘Actually, life could be fantastic!’ We could have more time, be more relaxed. We could learn how to be more creative and useful with our hands again. We could be less in debt. We’d have more time to play and to celebrate life!”
The foundation éducation21 coordinates and sponsors Education for Sustainable Development (German: BNE) in Switzerland.

This brochure has been conceived for the film Voisses of Transition. Documentary film, DVD, 66 minutes.