Sasha Kramer Transforms Waste into Resources in Haiti

For the complete video with media resources, visit: http://www.nationalgeographic.org/media/putting-waste-work-video/

Program

This video was filmed on Wednesday, June 22nd at the 2011 National Geographic Explorers Symposium at National Geographic Society headquarters in Washington, D.C.

Introduction
Sasha Kramer fights Haiti’s most pressing health, economic, and environmental problems, one toilet at a time. Driven by her conviction that sanitation is a basic human right, and the need for a simple, low-cost solution, Kramer turned to ecological sanitation. "Collecting, composting, and recycling human waste into fertilizer for agriculture simultaneously helps solve so many problems that result from extreme poverty: poor public health, low agricultural productivity, malnutrition, environmental degradation, and waterborne disease—the country’s leading cause of death in children under five."

Outline

- Haitian History and perspective: agricultural production to malnourishment (start-01:53 min.)
- Environmental destruction and post-colonial history (01:54-03:38 min.)
• Human waste and a brown lip around Haiti (03:39-05:26 min.)
• Poor sanitation: current examples, conditions and illnesses (05:27-06:44 min.)
• Sewage treatment and the problem of mixing waste streams (06:45-08:47 min.)
• Composting, ecological toilets and SOIL (08:48-10:20 min.)
• How the SOIL toilet works and urine as "liquid gold" (10:20-11:31 min.)
• The 2010 earthquake and a pilot project in Port-au-Prince (11:32-14:07 min.)
• A "poop-mobile" and the composting process (14:08-15:51 min.)
• Sustainable business, development and a household toilet model (15:52-16:36 min.)
• Transforming waste into a resource, and solving environmental and health problems (16:37-17:21 min.)

Strategies for Using Video in a Variety of Learning Environments

• Have students preview several of the videos and choose the one they find most inspiring. Have students describe in writing a conversation they might have with the speaker(s).
• Freeze the video on a relevant image. Have students observe details in the still image and jot down predictions of what the full video might address. Discuss students’ ideas before and after watching the video.
• Pose an open-ended question before students watch the video, and have them discuss their ideas before and after in small groups.
• Have students determine what they think the key message of this video is. Was the speaker effective in getting his or her message across?
• Show a short clip to engage students during class, and then have students watch the full video at home and write a paragraph responding to the content or a question you give them.
• Have students note statements that represent facts or opinions, including where it’s difficult to tell the difference. What further research might help distinguish facts and opinions? How might the speaker’s viewpoint compare with others’ viewpoints about a topic?
## Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>agriculture</td>
<td>noun</td>
<td>the art and science of cultivating the land for growing crops (farming) or raising livestock (ranching).</td>
</tr>
<tr>
<td>cholera</td>
<td>noun</td>
<td>infectious, sometimes fatal disease that harms the intestines.</td>
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<tr>
<td>compost</td>
<td>noun</td>
<td>mixture of decaying organic material, such as food waste and plants.</td>
</tr>
<tr>
<td>ecology</td>
<td>noun</td>
<td>branch of biology that studies the relationship between living organisms and their environment.</td>
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<tr>
<td>human waste</td>
<td>noun</td>
<td>byproduct of human digestion - feces or urine.</td>
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<tr>
<td>hygiene</td>
<td>noun</td>
<td>science and methods of keeping clean and healthy.</td>
</tr>
<tr>
<td>sanitation</td>
<td>noun</td>
<td>promotion of hygiene, health, and cleanliness.</td>
</tr>
<tr>
<td>waste</td>
<td>noun</td>
<td>material that has been used and thrown away.</td>
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<tr>
<td>water-borne</td>
<td>adjective</td>
<td>transported or carried by water.</td>
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</tbody>
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### Articles & Profiles
- [National Geographic Explorers: Sasha Kramer—Ecologist](#)

### Websites
- [National Geographic Events: National Geographic Live!](#)
- [SOIL: Sustainable Organic Integrated Livelihoods](#)