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The Strawjet

The research team at ASET is developing a machine called a Strawjet which is designed to harvest straw, flax, hemp or other fibrous material and create continuous 2 inch diameter cables. This material can be assembled into 4" by 4" construction members (Strawcore), or into entire wall panels to form load bearing insulating walls. Structural beams can be produced with selected materials for regions of wood scarcity.



School

Technology development at ASET is accomplished using experienced mentors working with interns from universities led by ASET's technical director, David Ward. We believe that bringing



together young creative minds and the expertise of seasoned experts can lead to an exciting and highly productive environment. The primary focus is on developing a hand fed machine suitable for the developing world. ASET provides students with a set of

skills, an enhanced ability to solve problems, and a sense of enthusiasm and self worth that comes from making a meaningful contribution to the world. The program currently includes 10 mentors and 13 students working on 7 different projects

Overview

Over the next century a new type of technology will replace the resource consuming technology that has defined the last century. This technology will be based on the utilization of waste materials to make new products that are in themselves recyclable. The Strawjet accomplishes this by using surplus straw or other agricultural byproducts such as flax or hemp to build houses, thus reducing air pollution by avoiding the current practice of burning straw, sequestering the carbon content for the life of the building, and ending with a non-toxic, easily recyclable material when the house is replaced. Most importantly, structurally sound permanent buildings that can be built quickly in third world countries using locally available, low cost materials can be effective for disaster relief and beneficial to local and world economies.



Long term outcomes of the project

- *By providing abundant construction material, the standard of living for a substantial percentage of the world's population will be improved.*
- *ASET's interns benefit from experiencing a hands-on inventive process unavailable in the academic world.*
- *By improving the insulating qualities of buildings especially in the developing world, there would be significant energy savings, and thus reduction in carbon emissions.*
- *It has the potential to reduce mankind's reliance on trees as the primary construction medium, while sequestering carbon otherwise released annually from crop residue.*