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## Bikes & Blenders

### *Maya Pedal grinds it all*

What do a Chilean social housing scheme, a menstrual pad made out of banana fibres in Rwanda and pedal-powered technology in Guatemala have in common? Well, as the three finalists in this year's edition of the Curry Stone Design Prize they have all been singled out as projects engaging communities at the crossroads of change, which raise awareness and empower individual and collective needs.

by EMMA FIRMIN  
image MAYA PEDAL

Think pedal power and the call to ditch the car in favour of the cycle or stunts to run a generator by group muscles swerve into your mental lane. Yet, by the time this magazine is published Maya Pedal, the Guatemalan NGO founded by engineer Carlos Marroquin, will have found out whether its 'bicimaquinas' project is in receipt of a \$100,000 grant courtesy of Curry Stone at the prize-giving in New York. Bicimaquinas are 'pedal-powered machines made from used bicycles that make agriculture and household tasks faster and easier for rural residents with limited access to gas and electricity'. There's nothing slick about the results, it's a lab of practicalities, with the bikes donated from the US being transformed and reconditioned to anything from grain mills, water-pumps, coffee de-pulpers, roof-tile makers, bike trailers, washing machines and blenders. However, it's not just the designs (of which there are currently 24 and whose constructions are available as downloadable blueprints), which have set the ambitions of Marroquin and his staff apart. The reach of the bicimaquinas goes further off the circuit.

#### Enterprising ideas

Advocacy that results in enterprise rather than reli-

ance is the driver to the success of Maya Pedal. The project began in 1997, when Marroquin started working with the Canadian organisation PEDAL (Pedal Energy Development Alternatives), which aims to develop and promote the use of pedal powered technology. Funded by the Canadian International Development Agency and in partnership with various Guatemalan NGOs (COPREDE, COKADI, TPS and PRODESSA, Asociacion Campestina) and FarmFolk/CityFolk of BC, PEDAL coordinated the project for its first three years and while remaining a partner, in 2001 a new organisation in Guatemala was set up by local staff and volunteers. Maya Pedal also collaborates with a range of local, national and international groups to implement community-based projects, which not only utilise the bicimaquinas as pollution-free tools but also a way to make money.

Away from the slightly mad-cap-looking inventions, as PEDAL highlights, it is the placement of these devices that make the difference. 'As an example a women's group may form to cooperate in the running of a project to raise chickens for sale at a local market. With a bicimolmo (pedal-powered grain

# fenton



mill) they can process their homegrown corn and other locally available ingredients into feed mix for their chickens. In this way they lower their feed costs, eliminate the need to purchase industrial feed mixes (often containing unwanted dyes and other potentially harmful chemical concentrates) and become more self-sufficient in the process.' It's this kind of action-consequence, just like the building contractor that uses a bicycle-powered concrete compaction machine on construction sites in the region, along with selling the bicimaquinas locally at manufacturing cost that pushes the right buttons for engaging enterprise, and does what the Curry Stone Prize sets out to recognise in 'developing and implementing a visionary design innovation'.

#### Advocacy & Action

The other finalists for the 2010 Prize are Elemental's public housing scheme for Iquique's Quinta Monroy shantytown and Sustainable Health Enterprises (S.H.E.), which addresses girls' and women's lack of access to menstrual pads. The latter is not usually as

issue that comes to the attention of a visually-led media, yet within so-called 'developing' countries it's an obvious practicality that unsolved can cause days and weeks at school or work to be lost annually. And, yes, in some communities there is still the stigma of menstruation...SHE is led by founder Elizabeth Scharpf, and for past two years she has worked with a number of people and official bodies in Rwanda to advocate for more government support, educate individual and groups of Rwandans about basic aspects of women's health and how they can be improved, developed a cost-effective prototype of a sanitary pad made from banana tree fibres, and started the organisation of a franchise-based micro capital business model to distribute these pads once they are in regular production.' And Scharpf's quoted idea of the project's success, as the point at which she's 'driven out of a job', is a fitting headline for the whole Prize. #

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