## Mobile installation 'Hydrologic Corridor' at Gaia

Till June 2016 one can enjoy a display of the 'Hydrologic Corridor' Gaia. The panels revolving on bamboo sticks reflect a large-scale landscape restoration programme in East-Kenya. This mobile installation was made by Peter Westerveld (1951-2014) also initiator of the 'Hydrologic Corridor' in Kenya.

Peter Westerveld was born in Tanzania. After his studies at the Academy of Arts in Arnhem, he returned to Africa to start a safari business in Kenya. Worried about the desertification process, he developed the concept of the 'Hydrologic Corridor' to influence the rainfall regime and moderate the temperature extremes. Over a vast area of 20.000 km2 in the triangle Kilimanjaro-Mombasa-Malindi he planned soil and water conservation measures for natural re-greening in 12 strategically situated areas of 20-25 km2. The evapotranspiration from each of these areas contributes to atmospheric cooling and is supposed to create a more regular rainfall in the whole area.

This 'Hydrologic Corridor' forms the working concept for <u>Naga Foundation</u> and the <u>Justdiggit</u> network to revitalize desertified landscapes in Tanzania and Morocco to start with, through regreening for sustainable ecosystems, wildlife, ranching and agriculture.

Small amount of energy creates ripples of movement across the mobile, mimicking the effect that wind has on environment and also man's ability to create an imbalance in a once balanced system.

## Mobile installation

The installation is the culmination of Peter Westerveld's life work. It brings together photographs made by Peter over the forty years that he spent in Africa, detailed technical drawings which he developed over the last decade, and map images that he learnt to create via Google Earth in the more recent years. These images are combined in plexiglass panels which hang on natural copper wire-bound bamboos, creating a mobile landscape.

This mobile installation is a three-dimensional display of his views on the chain reaction of energy and water. The spinning of the panels symbolises the turbulence of the cooler humid air mixing with the monsoon wind at higher atmosphere. The panels end in broken connections indicating that the systems and problems in the landscapes are invisibly connected.



Work in progress in Brummen (Mariette Faber, 2014)

The elements of this work collectively display the consequences of man's systematic use and abuse of the environment. The work does not merely highlight the systemic problems that man has created within the environment, but also provides relatively simple solutions to these problems.

## Some of specific ideas of Peter Westerveld

The bamboos represent the project areas from the eastern coastal plain of the Indian ocean up to the higher plateau near the Kilimanjaro. Each panel can be considered as an assignment for the field engineer, representing project sites with maps, photographs, paintings and text showing location, problems and plans, water flow, soils, vegetation and infrastructure. Explanations, calculations and instructions are written on the black passe-partout.



The Hydrologic Corridor

Peter Westerveld's motivation to develop the 'Hydrologic Corridor' was to protect infrastructure and bring back the biodiversity: more water and green would keep wildlife from cattle ranching and agriculture. He developed some technics for this remote savanna areas, which you can find in the text around the pictures on the panels.

Peter's favourite is contour trenching for water conservation and natural restoration. Bulldoozer-built contour trenches of 1 m deep, 4 m wide at 40 m distance, can store showers of more than 100 mm. In his view most of the water will become available for the seeds in the soil to emerge and establish a cover of grasses, shrubs and trees in a natural way, to start within and around the trench itself.

To get the water at the surface for drinking purposes mainly, he used the triangle concept, narrowing the length of the trenches. Peter used trenches also to control the peak flow at drifts and bridges and to guide the flood water underground in order to protect structures and road crossings.

In Peter's view also infiltrated water was never lost. Not only was erosion avoided preventing road blocks and expensive repairs at crossings, but also did it contributed to increased groundwater levels and higher base flow in lower parts of the river.

This information sheet detailed design information from the pass-partouts are available for each bamboo location at Gaia galleries and <u>intranet</u>.