UT takes part in technology fund

The UT has announced plans to take part in a future Twente Technology Fund. The Executive Board (CvB) has confirmed this through Kees van Ast. The investment fund, with target assets of fifteen to twenty million euros, will invest in young, promising companies, mostly UT spin-offs. In exchange, the fund will receive a part of the shares in the new company.

The Twente Technology Fund will be a so-called seed investment fund, a professionally managed fund that invests in companies at an early stage. Most of these companies will be UT spin-offs, but external businesses will be eligible as well. When entrepreneurs are still trying to enter the market, the risk of investment is very high. In contrast, when the investment takes off, it could be extremely lucrative for investors.
Aside from the UT, banks and large investment parties, such as pension funds, plan to participate in the fund. Groups of private investors can also take part in the fund, says Kees Eijkel, the director of Kennispark Twente. Over the next couple of years, the aim is to generate fifteen to twenty million euros in this fund of which investments will be made in three to four businesses a year to a total of ten to fifteen companies.
The fund is mostly intended for young companies that need to make a big investment to start up their company. Eijkel points to spin-offs in the biotechnology and nanotechnology areas as good examples. Companies can also apply for funds at a bank, but they need certain guarantees that a young business simply cannot offer. Eijkel: 'And with the current financial crisis, banks are not easily willing to invest.' On account of the considerably high risks involved for investors in the Twente Technology Fund, the TTF will only invest in companies that are expected to show substantial growth in the coming years. 'We will concentrate on businesses that will grow and not settle for an eight, but strive for a ten,' says Eijkel. For that, entrepreneurs need a good business plan and a sound management team. The fund will support entrepreneurs to make their ambitions come true, for instance, to grow from five to fifty, or to even five hundred employees. In exchange for the investment, the fund will receive a part of the shares in the company through a share exchange construction. Micronit is an example of a successful UT-spin-off whose development fits the criteria of the TTF. This company has recently opened a branch in the U.S.
At present, a final round of talks with investors is still taking place. The intention is for the first companies to be able to apply in the summer for funding through the Twente Technology Fund.

Paul de Kuyper
Trans. Henriëtte van Dorp

RESEARCHER UNCOVERS VALUABLE INFORMATION

Tsunami: the tragedy and the truth

While it was widely believed that the huge tsunami that devastated parts of Asia in 2004 was a unique event, PhD candidate Ella Meilianda has uncovered information to the contrary. In her determination to understand the evolution of the coastline, she began researching historical records and ancient maps, and found written evidence of a mountain-like wave in the same region about 700 years ago.

Meilianda also discovered that smaller tsunamis occur as often as every 20 to 30 years. Combined with carbon dating on rock samples in Malaysia and other scientific studies, she has created a time line model of the Banda Aceh coastline in an attempt to predict future changes.
Born in Banda Aceh, the capital of Sumatra, Indonesia, Meilianda won a scholarship from the Indonesian government, and came to the Netherlands to pursue her PhD. On December 26, 2004, when the tsunami struck, she was working on her research proposal for the integrated coastal zone management of Banda Aceh for the UT's Water Engineering and Management Group. Unable to contact her family, she returned to the region and was grateful to discover her parents and sister were safe. Two months later, she came back to the Netherlands. Her family home was destroyed. Tragically, fifteen of her relatives were dead and childhood friends were missing.
Academically, the data she had collected on the morphology of the coastal system of Banda Aceh seemed of limited value. Meilianda needed to find a new avenue of research. With the support of her supervisor, Dr. Marjolein Dohmen-Janssen, and the guidance of her promoter, Professor Suzanne Hulscher, she decided to research the morphological development of the Banda Aceh coast after the tsunami on December 26, 2004. Soon after she began working on her new proposal, she was diagnosed with post-traumatic stress disorder and encouraged to take on a 50 percent workload. Almost exactly one year after the tsunami, in January 2006, Meilianda defended her proposal.
She says: 'I tried to stand firm. Emotionally, yes, it was difficult, but also there were so many uncertainties. I was concerned about the data because the morphology of the coastal system was completely changed. I began with a short-time scale using satellite images to compare the coast before and after the tsunami. I had images from four days after the event, and I kept monitoring the coast until 2007. But I was concerned. Was the tsunami really an unprecedented event? Then I had to know the whole story. So I widened my time scale.'
By comparing old historical topographical maps from the Netherlands with local maps, as well as ancient texts and archeological findings which recorded land subsidence, Meilianda attempted to create a link with the scientific evidence. Using the carbon dating information compiled in Malaysia and the curvature of sea level fluctuation that had occurred over the last millennium, she created a framework of the evolution of the Banda Aceh coastline. Meilianda then chose a 100-year time scale to plot future scenarios. She says: 'I needed to consider the intermittent forcing factors involved in shaping the coastal system of a tectonically unstable area. Combined with a regular wave climate causing temporal erosion of the coast, there was the famous issue of a rising sea level due to global warming. Yet there was also the threat of tsunami and land subsidence which often occurs after an earthquake. Both land and sea level could suddenly change, altering the water depth. This would affect the wave climate and lead to a different rate of sediment transport.'
Meilianda's research involved the analysis of surface changes of the coastal plain and sea-bottom topography (bathymetry) using GIS data processing at ITC, where she was supervised by Dr. Ben Maathuis. She defends her PhD on June 19, and says, 'What I accomplished in my thesis is just the beginning. I want to continue my research. It's important information if we want to design the coastal protection of this area. In my mind, it all goes towards the victims.'

Audrey Rhodes

Banda Aceh, Indonesia, 2004: The 1000 ton electricity generator ship was swept 2 km inland by the tsunami. It ended up less than 500 meters from Meilianda's parent's house. Photo: Ella Meilianda.


Ella Meilianda says, 'No coastal structure could stop such a huge tsunami. Now it will stay in history, and we can learn from its geological imprint.' Photo: Gijs van Ouwerkerk

English edition

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Editorial note

The UT-Nieuws English page publishes original features and news articles about people and research projects in the academic community. Tell us your story or recommend one of your colleagues to be featured in our weekly page. Send your suggestions to Robbin Engels: r.engels@utwente.nl.

Carnival parade live on TV Oost

For those who are not yet familiar with the madness of Carnival, get prepared to witness as the Dutch cast away their level-headed temperaments to dance on city streets, dressed in outrageous outfits. Traditionally, Carnival time falls just before Ash Wednesday (six weeks before Easter). Carnival revelers march in parades following grotesque, papier-mâché figures on floats while brass bands play popular Carnival songs, which often portray a satirical view on local and national politics.

In the eastern part of the Netherlands, one of the biggest Carnival celebrations is in the city of Oldenzaal, which is renamed during this time as *Boeskoolstad*, literally meaning cabbage city, adding to the 'flakiness' inherit in this cultural ritual.

For the first time, viewers can watch this year's local festivities broadcast live on TV Oost, which will feature images of festivities in Oldenzaal, an event that draws around 100 thousand visitors each year. One can take a train from Enschede's central train station or bike the ten kilometers to Oldenzaal's city center. Live broadcast of the Carnival parade will begin on Sunday, February 22 at 12:30 pm.