



PRINCE CLAUS CHAIR  
ANNUAL REPORT

2016



▶ THE INTERNATIONAL INSTITUTE OF SOCIAL STUDIES OF ERASMUS UNIVERSITY ROTTERDAM AND UTRECHT UNIVERSITY WILL ALTERNATELY APPOINT AN OUTSTANDING YOUNG ACADEMIC FROM A DEVELOPING COUNTRY TO THE PRINCE CLAUS CHAIR, FOR THE ADVANCEMENT OF RESEARCH AND TEACHING IN THE FIELD OF DEVELOPMENT AND EQUITY.

Prince Claus Chair

development and equity

ANNUAL REPORT

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## FOREWORD

On completion of my second full year as chair of the Prince Claus Curatorium, I once again realise what a privilege it is to hold this position. As the Prince Claus Chair rotates, I have thus far been able to observe from up close the important work of three bright young academics in the furtherance of development and equity in the world today. These academics come from an ever wider range of research areas and backgrounds.

We only need to look at our current chair holder, Professor Saradindu Bhaduri, to see how the Prince Claus Chair is branching out into new territory. For the first time since the establishment of the Chair, we have in our midst an engineer, a researcher from the field of innovation studies. In the course of the nomination process, I had met Professor Bhaduri via Skype, but when he was in the Netherlands with his family in May 2016 I had the great pleasure of meeting him in person: a man brimming with an infectious energy. The occasion was the delivery of his inaugural lecture, entitled 'Frugal Innovation by 'the Small and the Marginal': an alternative discourse on innovation and development'. As the regular venue – the historical building of the International Institute of Social Studies (ISS) – was undergoing a major renovation, Professor Bhaduri spoke at the no less beautiful Kloosterkerk in The Hague. Members of the Dutch royal family have been going to this church since the early seventeenth century. Therefore, it proved a fitting location for an event attended by our patron, H.M. Queen Máxima of the Netherlands.

When I listened to Professor Bhaduri's lecture, an abstract of which can be found in this annual report, I knew we had been right in selecting an academic from outside the traditional domain of development and equity. His words about frugal innovation in India and Africa set me thinking about my own field of health. Equipment for diagnostic testing is expensive and, unfortunately, beyond the budget of many hospitals in the global south. Instead of accepting this fate, however, we see that people become inventive and start searching for alternative solutions. These creative minds shape frugal innovations. The cost-effective medical equipment resulting from this inventiveness is often of such ingenuity and good quality that it is eagerly imported by the global north.

From the area of frugal innovation the Prince Claus Chair will be shifting its focus to the related realm of affordable therapeutics over the current two academic years. In 2016, we were delighted to find a worthy successor to Professor Bhaduri in Fatima Suleman, who is an Associate Professor in the discipline of Pharmaceutical Sciences at the University of KwaZulu-Natal in South Africa. It is the second time we have selected a scholar from a field that might not seem at first glance to be connected to the Prince Claus Chair, but Professor Suleman matches perfectly with our core values of creating favourable conditions for development and increased equity.

Professor Suleman told me about her work and herself during a Skype-interview. In 2011 and 2012, she was a member of the Pricing Policy Guideline Committee of the World Health Organisation. This is very good news as she will be able to bring relevant departments of Utrecht University and the ISS of Erasmus University Rotterdam into contact with her vast network at the World Health Organisation (WHO). In turn, I am convinced that Professor Suleman will benefit from the unique pooling of know-how the Netherlands can offer when it comes to affordable therapeutics.

It is my strong belief that not only do we owe it to our gifted chair holders and their splendid efforts, but that we also have a duty to encourage the cross-pollination of expertise and experience they bring with them. The Prince Claus Chair has been able to make a difference in the past thirteen years precisely because it has consistently encouraged and nurtured cross-pollination. I would like to thank chair holders past and present for their invaluable contribution.

### **Professor Louise J. Gunning-Schepers**

Chair of the Curatorium

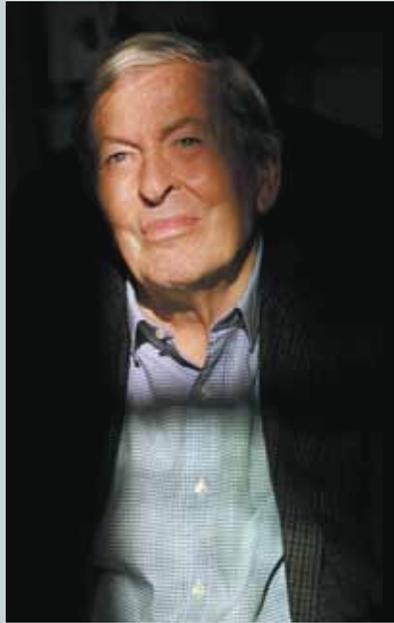
► Professor Louise J. Gunning-Schepers is a Distinguished University Professor of Health and Society at the University of Amsterdam. Her position as chair of the Curatorium is in a personal capacity.



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## OBJECTIVES OF THE PRINCE CLAUS CHAIR



The objective of the Prince Claus Chair is to continue the work of His Royal Highness Prince Claus of the Netherlands (1926-2002) in development and equity, by establishing a rotating Academic Chair.

Since the Chair was established in December 2002, Utrecht University and the International Institute of Social Studies of Erasmus University Rotterdam have alternately appointed an outstanding young academic from a developing country to the Prince Claus Chair. The objective is to advance research and teaching in the field of development and equity. Candidates for the Chair are nominated by a Curatorium, under the chairmanship of Professor Louise J. Gunning-Schepers.

### **H.M. Queen Máxima of the Netherlands, Honorary Patron of the Prince Claus Chair**

H.M. Queen Máxima of the Netherlands served as the first chair of the Curatorium of the Prince Claus Chair from when it was founded in 2003. In May 2014 she symbolically handed over an African chief's staff to the incoming chair, Professor Louise J. Gunning-Schepers, and graciously agreed to assume the role of Patron. As Patron, Queen Máxima remains associated with, and deeply committed to, the work of the Prince Claus Chair on issues of development and equity.



## PRINCE CLAUS, THE INSPIRATION FOR THE CHAIR

His Royal Highness Prince Claus of the Netherlands was strongly committed to development and equity in North-South relations. Through his work, his travels and his personal contacts, he gained a deep understanding of the opportunities for, and the obstacles facing, equitable development. He was tireless in his work for development and equity throughout the world, bringing people together to solve problems and make the most of opportunities. His knowledge, his accessibility and his personality all made an important contribution to his work. As a result, he was – and remains – a source of inspiration to many.

In 1988, Prince Claus received an Honorary Fellowship from the International Institute of Social Studies (ISS) 'in recognition of his continued insistence on the importance of reducing the differences between the rich and the poor in national and international fora, while emphasising the human dimension of this process and not only that of international policy and strategy.' At the official ceremony for the award of the Fellowship, Prince Claus gave an acceptance speech stating his views on development and equity in the form of 23 propositions.

The establishment of the Prince Claus Chair attests to the deep respect and appreciation of the academic community of Utrecht University and the ISS for Prince Claus as a person, for his work, and for his

commitment to and authority in the field of development and equity throughout the world.

Prince Claus was born Claus von Amsberg in 1926, in Dötzingen (Hitzacker), Niedersachsen. He studied at the University of Hamburg in the Faculty of Law and Political Science (1948-1956), after which he worked at the German embassy to the Dominican Republic and as Chargé d'Affaires to the Republic of the Ivory Coast. From 1963 to 1965, he worked at the Ministry of Foreign Affairs in Bonn, in the Department of African Economic Relations.

After his marriage to Her Royal Highness Princess Beatrix of the Netherlands in 1966, Prince Claus focused his efforts on development cooperation. He was appointed as a member of the National Advisory Council for Development Cooperation (Nationale Adviesraad voor Ontwikkelingssamenwerking, NAR). In addition, he was Chair of the National Committee for Development Strategy (Nationale Commissie voor de Ontwikkelingsstrategie), a position he held from 1970 to 1980, and Special Advisor to the Minister of Development Cooperation. In 1984, he was appointed Inspector General of Development Cooperation. To commemorate the Prince's 70th birthday, the Dutch government established the Prince Claus Fund for Culture and Development (Prins Claus Fonds voor Cultuur en Ontwikkeling), of which Prince Claus was Honorary Chair. The objective of the Fund is to increase cultural awareness and promote development.

PROFESSOR  
PETER KNORRINGA,  
CHAIR OF SEARCH  
COMMITTEE

“When we were selecting the person to hold this chair, the guiding principle was to find someone who could make a contribution to the Centre for Frugal Innovation in Africa. Someone who could help the Centre to further shape its content and someone who also propagates the societal relevance of this subject. There are two schools of thought within Frugal Innovation: one is top-down and consists mainly of multinationals who adapt products to the local economy. The other school works bottom-up and takes the local community’s own strengths as its starting point. Saradindu Bhaduri belongs to the latter school. What makes him genuinely unique is that, in addition to his collaboration at a local level, he has academic acuity. He is an excellent choice for the Prince Claus Chair due to his experiential knowledge. Prince Claus always argued in favour of taking people from developing countries seriously and of collaborating on an equal footing. And that is exactly what Saradindu does. His research helps to give us insight into the added value of innovations that originate locally. Take, for example, local forms of medical treatment that have arisen based on experience. If we can give these treatments a scientific underpinning, this could lead to their integration into healthcare systems. Thanks to people like Saradindu, science is learning to communicate better with local communities.”



► **Peter Knorringa** is Professor of Private Sector & Development at the International Institute of Social Studies (Erasmus University Rotterdam) and Director of the Centre for Frugal Innovation in Africa (Leiden University, Delft University of Technology and Erasmus University Rotterdam). He was Chair of the Prince Claus Chair Search Committee, 2015-2017.

“THANKS TO PEOPLE LIKE  
SARADINDU, SCIENCE IS  
LEARNING HOW TO  
COMMUNICATE BETTER WITH  
LOCAL COMMUNITIES”



Nairobi Innovation Fair, Kenya

PROFESSOR  
SARADINDU BHADURI  
CHAIR HOLDER  
2015-2017



Professor Bhaduri is based at the Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi, India. He is a member of the European Network of Frugal Innovation and INDIALICS, the Indian Chapter of Globalics. He has been a co-investigator on the Marie Curie Actions - International Staff Exchange Scheme (IRSES)- Crossing Boundaries: Knowledge and Technology Transfer and Innovation. Professor Bhaduri is a specialist in the field of frugal innovation 'by and for the poor' with a focus on informal sector innovations, and was appointed by the International Institute of Social Studies of Erasmus University Rotterdam as holder of the Prince Claus Chair 2015-2017 for his expertise in this field of studies. On 23 May 2016 Professor Bhaduri gave his inaugural address in the presence of Her Majesty Queen Máxima, members of the Curatorium of the Prince Claus Chair and many distinguished guests. In his position as holder of the Prince Claus Chair, Professor Bhaduri cooperates closely with the Centre for Frugal Innovation in Africa, a research collaboration of Leiden University, Delft University of Technology and Erasmus University Rotterdam.



## ABSTRACT OF THE INAUGURAL LECTURE

### FRUGAL INNOVATION BY 'THE SMALL AND THE MARGINAL': AN ALTERNATIVE DISCOURSE ON INNOVATION AND DEVELOPMENT



Since its entry into the discourse on innovation some years ago, frugal innovation has attracted keen attention from scholars and policymakers alike. The European Union, for instance, is currently exploring options for policy support to build up frugal innovation capabilities in its industry. Among academic scholars, reception of the term has been both 'enthusiastic' and 'cautious'. While scholars in management studies have overwhelmingly welcomed its arrival in academic discourse, scholars in the field of innovation and development have been rather sceptical about its implications. For many in this group, the term is merely 'corporate spin' or 'old wine in a new bottle'. The absence of a clear definition of the term may have contributed to this mixed response.

The frugal innovation discourse opens up a new possibility in the literature on technology, innovation and development by explicitly referring to the behavioural characteristics of agents and economic activities in informal economies in the forms of *jugaad* (in India), *zizhu chuanxin* (in China), and *gambiarra* (in Brazil). However, while the scholarship calls for absorbing the knowledge available in the informal economy of the vast global South, it does not intend to analyse the processes through which this body of knowledge sustains itself and grows. Ultimately, the only way that those at the bottom of the pyramid can be emancipated is by being able to enter the domain of modern market mechanisms, as consumers of cheap, 'no frills' products, produced by large corporations. At the present time, the contribution of frugal

innovation discourse to innovation and development remains underexplored.

Our research aims to contribute to this debate by broadening the domain of frugal innovation research. This is achieved by bringing the innovative activities of individuals and firms in the informal economies of the global south onto the radar of frugal innovation scholarship. We argue that such an inclusive version of frugal innovation can contribute to formulating an alternative discourse on innovation and development by better appreciating the various shades of innovative behaviour, their motivations, sources of ideas, and implications for the economy and society. We draw upon the diverse usage of the terms 'frugal' and 'frugality' in the various branches of social science, ranging from economics to decision theory, in our efforts to reshape the discussion on frugal innovations. The emphases on 'experiential knowledge', 'judicious use and reuse of resources', 'non-optimising behaviour' and 'heuristic based learning' in these strands of literatures help us decode the innovative behaviour in the vast informal economy of the global south, the total value of which is estimated by some to be US\$ 10 trillion.

The characteristics of innovative behaviour in this segment of the economy, however, are diverse, subtle, and have often remained below the radar of innovation scholarship. Our research has taken up India and Kenya and tries to bring out a comparative understanding of innovative behaviour in the lock and security-related industries in these two economies.

## PERSONAL PROFILE

Professor Bhaduri's research in the field of frugal innovation focuses on informal sector innovation. His areas of interest include technological change, technology policy, applied econometric analyses and heterodox economics. Professor Bhaduri's research helps to get insights into the added value of local innovations.

## CURRENT POSITIONS

APRIL 2014 – TO DATE

Associate Professor at the Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi, India.

2015 – TO DATE

Member, European Network on Frugal Innovation.

2014 – TO DATE

Member, INDIALICS (the Indian chapter of Globelics).

2013 - 2016

Co-Investigator, Marie Curie Actions - International Staff Exchange Scheme (IRSES)- Crossing Boundaries: Knowledge and Technology Transfer and Innovation.

## PREVIOUS POSITIONS

OCTOBER 2003 - APRIL 2014

Assistant Professor, Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi, India.

DECEMBER 2002 – OCTOBER 2003

Lecturer (Economics) in the Department of Commerce with Farm Management, Vidyasagar University, West Bengal, India.

APRIL 2002 – DECEMBER 2002

Research Scientist, at the Centre for Studies in Diplomacy, International Law and Economics (currently, Centre for International Trade and Development), School of International Studies, Jawaharlal Nehru University, New Delhi, India.

## EDUCATIONAL BACKGROUND

2005

Postdoctoral Fellow in Evolutionary Economics, Evolutionary Economics Group, Max Planck Institute of Economics, Jena, Germany.

2001

PhD in Economics, Jawaharlal Nehru University, New Delhi, India.

1999

MPhil in Economics, Jawaharlal Nehru University, New Delhi, India.

1997

MA in Economics, School of International Studies, Jawaharlal Nehru University, New Delhi, India.

1995

Bachelor of Science (Hons) in Economics, Maulana Azad College, Calcutta University, Kolkata, India.





Nairobi Innovation Fair, Kenya



Presentation at a workshop organised by the Institute of Development Studies, University of Nairobi



Visit to EcoPost factory in Nairobi, June 2016  
EcoPost produces sustainable building materials from plastic waste

## ACTIVITIES AS HOLDER OF THE CHAIR

### SPEECHES, LECTURES, PANELS, WORKSHOPS AND FIELD VISITS

Since his appointment as chair holder, Professor Bhaduri has lectured and addressed audiences at various universities and organisations. Below is a selection of his activities.

#### 13 DECEMBER 2016

Gave a lecture at the Dutch Ministry of Foreign Affairs on Frugal innovation in development policy: a conjectural roadmap'.

#### 24-25 OCTOBER 2016

Participated in strategic sessions organised by the Centre for Frugal Innovation in Africa in the Netherlands.

#### 26 SEPTEMBER-5 OCTOBER 2016:

Undertook field work in Nairobi, Kenya, participated in meetings with the National Commission for Science Technology and Innovation and the Traditional Medicine and Drug Development Programme, KEMRI.

#### 7 SEPTEMBER 2016

Interviewed by NESTA, United Kingdom for their project with Fraunhofer ISI on 'frugal innovation and re-engineering of traditional techniques'.

#### 17-21 AUGUST 2016:

Conducted field visit of Dindugul lock cluster in Tamil Nadu, India.

#### 8 JULY 2016

Participated in a seminar, entitled 'Indo-Dutch Perspectives in Development Studies', at the International Institute for Social Studies of Erasmus University, The Hague, The Netherlands.

#### 5 JULY 2016

Gave a presentation on 'Frugal Innovation: drivers, motivations and consequences' at ENVIU, Rotterdam, The Netherlands.

#### 5-12 JUNE 2016

Visited Kenya and gave a presentation at a workshop organised by the Institute of Development Studies, University of Nairobi.

#### 23 MAY 2016

Held his inaugural lecture 'Frugal Innovation by 'the Small and the Marginal': An alternative discourse on innovation and development' in the Kloosterkerk in the Hague. The inaugural address was attended by Her Majesty Queen Máxima of the Netherlands, the patron of the Prince Claus Chair.

#### 19 APRIL 2016

Participated in a reading group at the Centre for Frugal Innovation in Africa in the Netherlands.

5 MARCH 2016

Conducted field visits to lock cluster in Aligarh, India.

1-7 FEBRUARY 2016

Conducted field visits to lock making firms in West Bengal, India.

## PUBLICATIONS

Professor Bhaduri has continued to submit papers to specialist journals and publish widely since his appointment as chair holder. Below is a selection of his publications.

- 'Frugal Innovation by 'the Small and the Marginal': An alternative discourse on innovation and development', Prince Claus Chair Inaugural Lecture, 23 May, 2016, The Hague.
- 'Scientists' motivations to innovate, catch-up and collaborate: a trans-disciplinary perspective', accepted in Hilpert U (ed.), Handbook on Politics and Technology, Routledge, 2016.
- 'Politico-historical contingencies, intellectual property rights, and economic performance across countries: A simultaneous equation system perspective', The Journal of World Intellectual Property, Vol 18 (3-4), 107-126 (with D. J. Francis, D. Dutt, V. Kumar, F.A. Sheikh), 2015

- 'Growth of Water purification technologies in the era of regulatory vacuum in India: a critical outlook', Current Science 108 (8) 1421-23 (with Aviram Sharma and Nazia Talat), 2015.
- 'Seventy five years of National Planning Committee (1938-2013). A recollection', Science and Culture. 81 (3-4), pp. 66-71. (with Noklennyangla), 2015.
- Co-edited a book on 'Informal sector innovations: insights from the global South', with M. Muchie, A. Baskaran and F.A. Sheikh, Routledge, London, 2015.

## KNOWLEDGE BUILDING AND SHARING

24 JUNE - 4 JULY 2015

Visiting Scholar, Tallinn University of Technology, Tallinn, Estonia.

12-28 DECEMBER 2015

Visiting Professor, ISCTE, Lisbon, Portugal.

2015

Member, Advisory Committee on Status of Social Science Research in India, ICSSR, New Delhi.

Member, Bio-Medical Ethics Committee, New Delhi, India.

12 DECEMBER 2016

Member, Committee for Ph.D. Defence, Delft University of Technology.



Nairobi Innovation Fair, Kenya



Field visit of Dindugul lock cluster in Tamil Nadu, India

## NETWORKING AND PARTNERSHIPS

During his term as Prince Claus Chair, Professor Bhaduri is working on expanding his network of researchers working on frugal innovation, both nationally (within the Netherlands) and internationally.

- Professor Bhaduri's primary collaboration is with the Centre for Frugal Innovation in Africa (CFIA), a multidisciplinary research centre of Leiden University, Delft University of Technology and Erasmus University Rotterdam. Together with researchers within the Centre, Professor Bhaduri is developing a research agenda on 'Bottom-up frugality and indigenous knowledge'.
- To do field work research and as part of the collaboration with CFIA, Professor Bhaduri also travelled to Kenya in June 2016. Here he spoke with several representatives of the pharmaceutical and security industries. These contacts were later used by Dr Kinsuk Mani Sinha, the postdoctoral researcher working with the Chair, during her field work in the fall of 2016. Professor Bhaduri also met with representatives of the Kenyan National Council on Science, Technology and Innovation (NACOSTI) and is currently, together with CFIA, exploring opportunities to set up a research project for the Council.

- In 2015 Professor Bhaduri attended the launch of Delft University of Technology's global initiative and the 'Frugal Innovation and Inclusive Development' seminar of CFIA. Here he met with colleagues from Delft University of Technology who work on industrial design. Based on these interactions, Professor Bhaduri was invited to take part in a PhD public defence ceremony as an examiner.

## NWO-WOTRO

NWO-WOTRO has generously supported the work of Professor Bhaduri by funding the position of his research assistant, Dr Kinsuk Mani Sinha. WOTRO supports scientific research on development issues, in particular poverty alleviation and sustainable development. Its scope includes all low and middle-income countries. WOTRO is a division within NWO (the Netherlands Organisation for Scientific Research). For its activities, WOTRO receives funding from the Dutch Ministry of Foreign Affairs.

## KINSUK MANI SINHA, POSTDOCTORAL RESEARCHER

“Together with Professor Bhaduri, I study the features of the process of frugal innovation and diffusion and how these features differ across different organisations or individuals. To observe the process of frugal innovation I did fieldwork in both India and Kenya. In India I studied the lock and key industry, which largely belongs to the informal economy. Most of these firms are operating in a resource-constrained environment. In Kenya, however, the lock industry imports complete security systems, and belongs to the formal economy in which larger (inter)national companies are involved. By comparing the two countries, we have the opportunity to study the research questions from a different perspective.

In the informal economy in the global south the word ‘innovation’ means something different than it does in the Western world. Innovations made in the informal economy are often a huge step for the local people concerned. After analysing all the data, I hope to be able to explain how a frugal innovator takes a decision. What is the role of the local context? How does he/she learn from the local context?

I think this research will have policy implications. Quite often the individuals or firms operating in the informal economy or living in a resource-constrained environment are perceived only as the receivers of innovations, especially by policy makers (top-down processes). But that is not the case. They are capable of innovating for themselves, of adapting innovations to fit with their requirements, and they know what they want (bottom-up processes) but at times they do not have the means to achieve their objective. I hope our research helps in bridging this gap in understanding between the top-down and bottom-up processes.”



➤ **Kinsuk Mani Sinha** is a postdoctoral researcher working with Professor Saradindu Bhaduri. She is based at the International Institute of Social Studies, Erasmus University of Rotterdam. The position is also a part of the Centre for Frugal Innovation in Africa, a strategic alliance between Leiden University, Delft University of Technology and the Erasmus University Rotterdam in the Netherlands.

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Nairobi Innovation Fair, Kenya

## MINOR ADAPTATIONS WITH MAJOR IMPLICATIONS



Field work in the lock and key/security sector in India

**Professor Saradindu Bhaduri and Professor Peter Knorringa are ambitious, but in a modest way. “Studying frugal innovation is not something new”, they say. “But if we want to help poor communities improve their lives, this is the right time to study frugality in a more theoretical way.”**

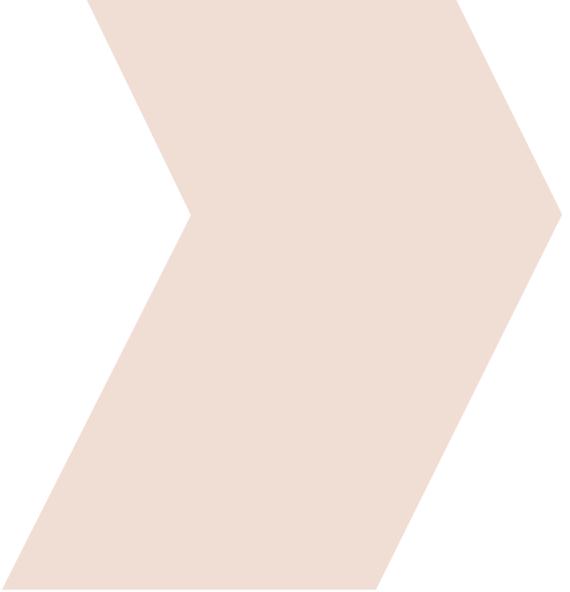
### IMPETUS FOR THEORETICAL RESEARCH

New Delhi, 1999. An Indian PhD student in his mid-twenties walks down the hallway of Jawaharlal Nehru University. His brain is working overtime, over and over again scanning images and articles, theories and thoughts about the pharmaceutical industry in his country and the way it has developed in the twentieth century, as he runs into one of his teachers. It has been a while since the two men last met and they chat to catch up. The teacher

asks the student what kind of research he is doing for his PhD. “Well, I’m looking at innovations and technological change in the Indian pharmaceutical industry,” the young man tells the elder. Fast forward to 2016. At the headquarters of the International Institute of Social Studies (ISS) in The Hague, the 43-year-old Professor Saradindu Bhaduri still remembers the next thing his teacher said. “He asked me straight away, ‘Do they do any major innovations?’” A question that must have made perfect sense to him, as it did to many at that time. The young Bhaduri, however, had a different take on the matter. “What I was – and still am – interested in, is minor innovations. Small adaptations.”

The Indian researcher, who is based at the Centre for Studies in Science Policy at Jawaharlal Nehru University, is on one of a series of visits to the ISS in his role as holder of the Prince Claus Chair. Today, he is joined by Peter Knorringa, professor of Private Sector & Development at the ISS. Knorringa finds it revealing that, also in India, in order to be taken seriously as an academic, one had to study large-scale innovations and major technological breakthroughs. Schumpeterian innovations, Knorringa and Bhaduri call them, referring to the Austrian economist who set the standard for mainstream innovation thinking with his 1942 book ‘Capitalism, Socialism, and Democracy’. In his publication Schumpeter advanced the hypothesis that it is large firms with market power who accelerate the rate of innovation. Bhaduri: “The question my teacher

“WHAT WILL MAKE A DIFFERENCE NOW FOR POOR COMMUNITIES IN THE GLOBAL SOUTH, ARE SMALL-SCALE, FRUGAL INNOVATIONS”



asked came from a Schumpeterian background, while I approached innovation from a development point of view.” The connection between the frugal innovation research Bhaduri was interested in and mainstream innovation research, has been strenuous, he says, perhaps due to the fact that frugal innovation research has been driven mainly by empirical studies. “That has given me an impetus to study it in a more theoretical manner.”

## GOING AGAINST THE STREAM

The lack of a critical mass of theory on the topic of frugal innovation is the very reason why the Centre for Frugal Innovation in Africa (CFIA), an initiative of Leiden University, Delft University of Technology and Erasmus University Rotterdam, which Knorringa heads, recommended Professor Bhaduri to the Curatorium of the Prince Claus Chair. “In this field there is a booming set of case studies, where researchers point at all kinds of interesting innovations,” Knorringa says. “Take for example mobile banking, where people can transfer money through text messages. Observed from a Schumpeterian angle, innovations like these are not radical. Rather, they are small, bottom-up adaptations on an existing platform. But they are very important and meaningful innovations at a local level. From a development perspective they are critical. The problem is, though, that they are not very well theorized. So when we were searching for a candidate from the area of frugal innovation, it was our ambition to find somebody who could spearhead a more

conceptual and analytical agenda. Somebody who was willing to go against the stream, you could say. Because this gap needs to be filled in order to show the importance of frugal innovation in the academic arena.” For it is the conviction of the CFIA, Knorringa says, that large-scale, technological advances are not the key innovations the global economy needs. Especially not from a development perspective. “What will make a difference now for poor communities in the global south, are small-scale, frugal innovations.”

“THIS GAP NEEDS TO BE FILLED IN ORDER TO SHOW THE IMPORTANCE OF FRUGAL INNOVATION IN THE ACADEMIC ARENA”

All of this is not to suggest, Professor Bhaduri is careful to point out, that he was the first to approach frugal innovation from a theoretical viewpoint. “This whole alternative paradigm of research, linking technology to development, already emerged in the 1980s,” he stresses. “It was not, however, a widely popular area of research in India. Even though the pharmaceutical industry in India was developing very well by making modest, incremental changes, there was no critical

body of conceptual or theoretical literature highlighting the importance of such minor innovations for the growth of this industry. Mostly, Indian research was concerned with major innovations, which in fact were not happening in India at that time, instead of looking at the minor ones that actually were happening. So there was a separation between what academics were doing and the way the pharmaceutical industry was moving ahead.”

## DEVELOPMENTAL IMPLICATIONS

Bhaduri explains that the pharmaceutical industry in India is known for its generic drugs – the result of a process that started in the 1970s. “In the 1960s,” he says, “drug prices were at their highest in India. This led to several kinds of policy change. One of the things the government did, was to remove the patent protection for pharmaceuticals. Since 1911, as a ‘legacy’ of the British colonisation, India had had a strong patent law, at a time when many European countries did not have such laws. The government realised, over time, that the strong patent law was getting in the way of developing competitive edge and technological capacity for the industry. When the patent protection under the Patent Act of 1970, was weakened to cover only processes and to protect them for a much more limited time, the industry took full advantage through reverse engineering, imitation based learning, and the development of cheaper processes. “This was the major driving force”, Bhaduri

says, “behind the growth of the industry and its development into what is today known as ‘the pharmacy of the world’, for its capacity for producing cheap drugs for Africa and many other places around the globe. You have to understand, however, that this innovation process was not a technological-change driven process. None of these innovations were patented. None of them brought any new medicines. But they did change Indian healthcare in a major way by providing cheap medicines and reducing healthcare costs. It had tremendous developmental implications.”

Has Professor Bhaduri just given the definition of frugal innovation? Yes. Or rather, maybe. “Yes, it was an example of how frugal innovation can work,” he says. “But back when I was studying the development of the Indian pharmaceutical industry, around the year 2000, I didn’t know that in ten years it could be linked to the discourse on frugal innovation.” And anyway, for Bhaduri, it is not about definitions. “My research is about what frugal innovation encompasses. I’m looking at all these scenarios, such as my example of the pharmaceutical industry, and how it connects to frugal innovation. What are the processes that lead to it? How does it come about?”

## THE TIME IS RIGHT

The research Bhaduri does during his tenure as holder of the Prince Claus Chair, will not be only about definitions. Knorringa says the CFIA does hope to give some kind of direction to the



The picture above features a selection of cooking stoves that are produced and sold in the informal metal sector of Nairobi, Kenya. By means of incremental innovation, the cooking stoves have been ingeniously improved by placing a ceramic lining on the inside of the stoves, guaranteeing more efficient use of heat and a reduction in the amount of charcoal used.

dialogue on frugality. “We are trying to unsettle the traditional discourse and construct our own discourse in a way that would make it clearer to colleague-researchers within and outside of the Leiden, Delft and Erasmus universities what is at the core of frugality and what is at the boundaries.” At the moment, Knorringa explains, different people have different perceptions. “Some people think frugality is about a big enterprise making a cheaper variety of, say, a smartphone, or recycling it. Others think it is about a local NGO or community organisation coming up with a refrigerator that doesn’t need electricity. What we are saying is, ‘Yes, it can be, but it is not the whole story.’ We would like to clarify the conceptual underpinning, to put it in academic terms, of what frugality is, in order to make it easier for people to understand it and decide if they want to be part of it.”

Be part of it. If that sounds like a slogan persuading people to join some kind of movement, it may not be too far off the mark. In his inaugural speech for the Prince Claus Chair, in May 2016, Professor Bhaduri said that “use of the terms ‘frugal’ and ‘frugality’ in economics can be traced back to Adam Smith.” In as early as 1776, the philosopher and economist observed frugality “in demonstrating the value of ‘experience’ in offering innovative solutions to frequently encountered problems in daily lives.” But, as Knorringa explains, due to early industrial revolution, with its mass consumption and its need for mass production and high-end innovations, and due to the massive reconstruction program after World War II, the

“I WOULD SAY THAT RIGHT NOW MANY GLOBAL EVENTS ARE HAPPENING AT THE SAME TIME WHICH CALL FOR A MORE FRUGAL APPROACH”

old concept of frugality slipped out of sight. “Now, however, we are shifting to a new paradigm where frugality, or doing old things in a new way, is becoming important again. So we think we have a story.”

One could argue that the time for frugal innovation is right, to use another expression that sounds like a catchphrase. And Professor Bhaduri does not disagree. “I would say that right now many global events are happening at the same time which call for a more frugal approach: the economic crisis, the debate on climate change, the focus on sustainability, and the withdrawal of the state in many developing countries, where the state cannot do everything, but will support development initiatives of individuals. Right now, it is all coming together and leading to a call for a more sustainable, more local, and more economical use of resources.” Knorringa adds: “We live in a time where there is a need for a grander change of processes and we believe this research will help us make this transition more meaningful for poor communities.”



Field work in the lock and key/security sector in India



## FRUGAL INNOVATION IN KENYA

Besides his visits to the ISS in The Hague, as holder of the Prince Claus Chair, Professor Bhaduri has done field research in not only India but also in Kenya. "What makes Kenya special," Knorringer points out, "is that it has a very dynamic formal sector, and that there is an increasing number of links between the formal and the informal sectors. It is interesting to study whether and how the traditional top-down and new bottom-up processes leading to innovation are connected." Bhaduri says that his visits to Kenya have been profitable. "Policymakers there are very ambitious and truly motivated to work on the so-called informal sector. They want research guidance on what the informal sector is doing and how it can help improve the lives of people. That has been very encouraging to me."

Bhaduri: "In Kenya, we are looking at the lock and security industry, which is very dichotomous. On the one hand you have simple locks for the poor while on the other hand there is a strong demand for modern security arrangements among the middle and upper classes. There are many new firms coming up in the informal sector which are trying to cater to these middle, upper, and even corporate markets through certain kinds of frugal innovations. They import equipment parts from developed countries and combine them to provide solutions to these high-end markets. My question is: how do they do this? How do

they acquire and combine the necessary knowledge of, for example, these very modern technologies, the software, the ICT? And how does it help them cater to these growing markets? Understanding how this works, I believe, will help us understand what frugal innovation means and how frugal innovations are developed."

PROFESSOR  
JAVIER COUSO  
CHAIR HOLDER  
2014-2016



"During my tenure as Prince Claus Chair holder 2014-2016, I was fortunate enough to work closely with the scholars at the Netherlands Institute of Human Rights (SIM) of Utrecht University, as well as with other academics of the Law School. This environment, which was both intellectual and collegial, proved to be an ideal setting for my continued research. The two-year period at the Prince Claus Chair may very well have been the most productive time of my academic career.

First of all, there was my main research, a study on the institutional and socio-political determinants of judicial independence in new democracies, with a focus on Latin America.

In the past decade, judiciaries in Latin America – and in other transitional democracies throughout the world – faced serious changes to their independence in the form of legislative and institutional reforms. This has limited their ability to act impartially and effectively in their pursuit of justice. Many governments have rejected the balance of powers, which has caused the politicisation of the judiciary to increase enormously in the region. There are, however, also countries where the courts are regarded as truly independent, and countries in which superior courts are conceived as relatively independent. Generally, assessing the degree of judicial independence can prove complex. Due to the lack of a single standard model to ensure judicial independence and the uneven

availability of comparative data, debates over the best way to measure the autonomy of judges have preoccupied scholars and practitioners for a long time. In view of Latin America, attempts have been made to develop methods to overcome missing data and the weaknesses of other indicators. Furthermore, the existing scholarship in this area is still struggling to find what works (and what does not) when it comes to adopting measures aimed at establishing impartial courts in new democracies.

The research I conducted with my academic assistant, the postdoctoral scholar Stefanie Lemke, clarifies which determinants can enhance judicial independence, by identifying the institutional and socio-political factors under which judicial systems are most effective.

Aside from my research project, I worked with Stefanie Lemke to build an inter-disciplinary and inter-institutional cooperation revolving around a wide range of scholars and practitioners with expertise relevant to the issue of judicial independence in new democracies.

In August 2015, I became an advisor to the Chilean minister Marcelo Díaz in the process of discussing a new constitution. In the same year, president Michelle Bachelet appointed me to represent her in the defence of two members of her cabinet in two impeachment procedures, which were ultimately rejected by the Chilean Congress.

Without a doubt, one of the personal highlights of my time at the Prince Claus Chair was the inaugural address, which I was honoured to deliver in May 2015. I held my oration, entitled 'Sine Qua Non: on the Role of Judicial Independence for the Protection of Human Rights in Latin America,' at a conference in the University Hall in Utrecht, in the presence of Her Majesty Queen Máxima, members of the Curatorium of the Prince Claus Chair, and many distinguished guests.

Furthermore, in May 2015, I had the great pleasure of organising the roundtable on 'Comparative Constitutional Theory' at the annual conference of the Law and Society Association in the USA, and co-chairing their annual meeting. In February 2016, I taught the seminar 'The Clash Between Liberal and Radical Constitutionalism in Contemporary Latin America' at the Center for Latin American Studies of the University of California, Berkeley (USA). In July, I co-organised an intensive two-week course for my home university in Chile in cooperation with the University of New South Wales in Australia.

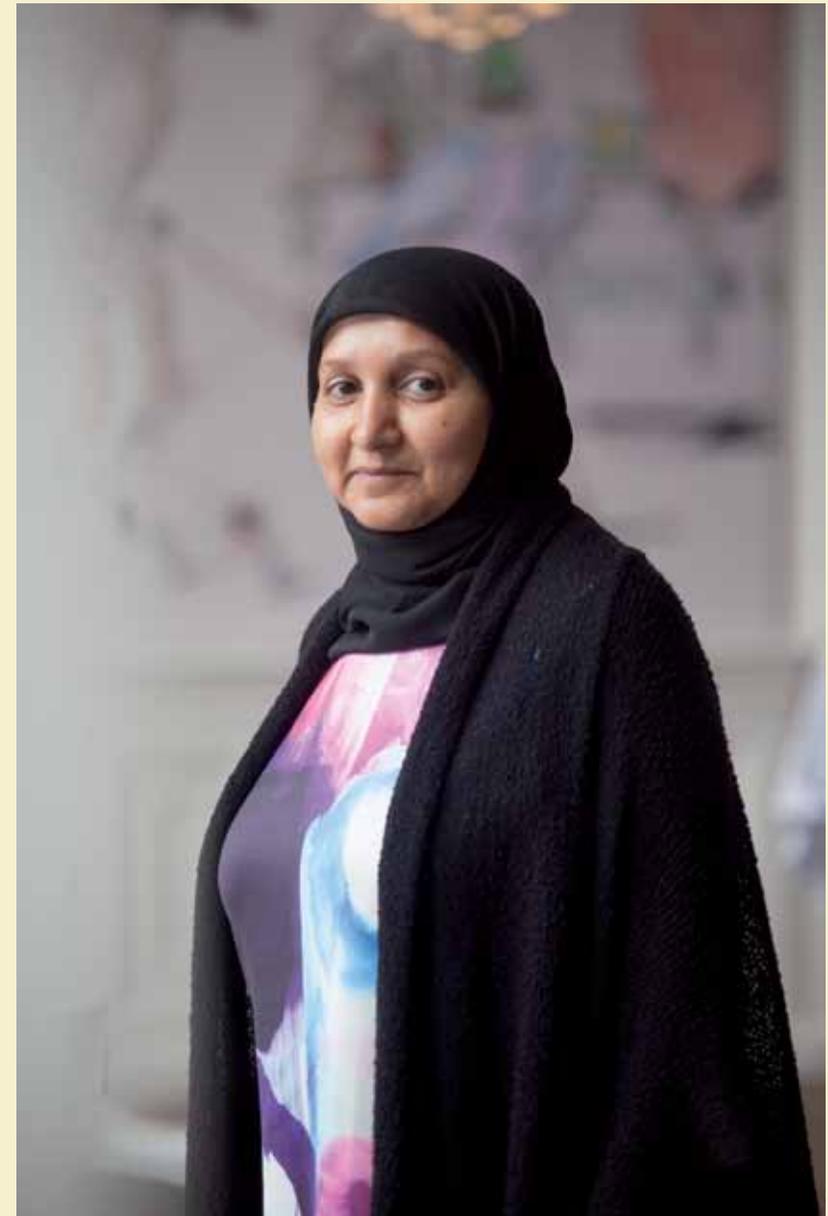
I cannot thank the Curatorium of the Prince Claus Chair enough for the invaluable support and opportunities they have given me. The scholarly networks which I have been able to develop during my time as holder of the Chair have translated into exciting plans for future academic collaboration. This will make what has already been a fascinating experience a lasting international partnership."

PROFESSOR  
FATIMA SULEMAN  
CHAIR HOLDER  
2016-2018

On the recommendation of the Curatorium of the Prince Claus Chair, Utrecht University has appointed Professor Fatima Suleman as holder of the Prince Claus Chair of Development and Equity 2016 - 2018. Professor Suleman is from South Africa. She works as associate professor of Pharmaceutical Sciences at the University of KwaZulu-Natal in South Africa, where she does research into the pricing of drugs for diseases which cause huge suffering, such as chronic conditions.

In addition to her appointment to the University of KwaZulu-Natal, Fatima Suleman also has ties with Drake University in the United States. She has taken part in various international commissions on drug pricing. She currently has a seat on a panel at the World Health Organisation (WHO) on pricing, health technology assessment and reimbursement.

Fatima Suleman will spend her two-year appointment in Utrecht working within the strategic research theme of Life Sciences. Her chair will be within the Faculty of Science, in the Department of Pharmaceutical Sciences. The chair she will hold, Affordable (Bio)Therapeutics for Public Health, has strong links to the research conducted in that department, in particular in the Utrecht Centre of Excellence for Affordable Biotherapeutics and the WHO Collaborating Centre for Pharmaceutical Policy and Regulation.



## PREVIOUS HOLDERS OF THE CHAIR

2013-2015



Professor Olajumoke Oduwole, from Nigeria, was appointed to the Prince Claus Chair by the International Institute of Social Studies of Erasmus University. During her tenure she focused on the nexus between international law and the implementation of the Right to Development (RTD). She looked at the practical effectiveness of the RTD in relation to development in Africa.

2010-2012



Professor Atul Kumar was appointed to the Prince Claus Chair by Utrecht University. Indian-born Professor Kumar has extensive experience in researching climate change, energy policy, energy-system technology and how a sustainable lifestyle can combat climate change.

2007-2008



Professor Alcinda Honwana was appointed to the Prince Claus Chair by the International Institute of Social Studies. Born in Mozambique, Professor Honwana is an authority on child soldiers in Africa and on the predicament of young Africans in the context of ongoing globalisation processes in postcolonial Africa.

2004-2005



Professor Gaspar Rivera-Salgado was appointed to the Prince Claus Chair by Utrecht University. The Mexican professor was appointed on the basis of his academic work in the field of indigenous rights, particularly in Latin America and the United States.

2012-2014



Professor Aylin Küntay, from Turkey, was appointed to the Prince Claus Chair by Utrecht University because of her work in the field of language and the socio-cognitive development of young children. Professor Küntay's research enables children with less-well-off parents to improve their social status by helping them to improve their language proficiency.

2009-2011



Professor Patricia Almeida Ashley was appointed to the Prince Claus Chair by the International Institute of Social Studies. The Brazilian professor is known for her interdisciplinary approach to Socially Responsible Entrepreneurship (SRE) and her research on the relationship between SRE and important social issues.

2006-2007



Professor Nasira Jabeen was appointed to the Prince Claus Chair by Utrecht University. Coming from a Pakistani background, Professor Jabeen focuses her teaching and research on the possibilities and constraints of good governance as a concept in the developing world.

2003-2004



Professor Amina Mama was appointed to the Prince Claus Chair by the International Institute of Social Studies. The Nigerian professor Mama was appointed for her contribution to the academic field of African culture and its relationship to development.

2011-2013



Professor Stella Quimbo, from the Philippines, was appointed by the International Institute of Social Studies. During her tenure as holder of the Prince Claus Chair, her research focused mainly on health insurance. She conducted research on access to health insurance and carried out an evaluation of the impact of health insurance on financial risk protection and quality of care.

2008-2010



Professor Irene Agyepong, from Ghana, was appointed to the Prince Claus Chair by Utrecht University. As a public health expert, Professor Agyepong is a strong advocate of investing simultaneously in research into public health and the development of health policy. In her research she has been concentrating on how to manage and transform health systems in Sub-Saharan Africa.

2005-2006



Professor Rema Hammami was appointed to the Prince Claus Chair by the International Institute of Social Studies because of her impressive academic contribution, as an intellectual champion, to peace and co-existence in the Palestinian Territories. Her gendered approach provides a valuable point of entry into issues of governance, civil society, citizenship, rights and peace.

2002-2003



Professor S. Mansoob Murshed was appointed as the first holder of the Prince Claus Chair by Utrecht University. Professor Murshed is an economist from Bangladesh and was appointed for his academic work in the fields of trade and freedom of trade and in the field of peace and conflict management in relation to economic development.

## THE CURATORIUM OF THE PRINCE CLAUS CHAIR



The Curatorium is responsible for appointing new Prince Claus chair holders. Her Majesty Queen Máxima of the Netherlands is the Patron of the Prince Claus Chair. In 2016, the Curatorium comprised the following members:

- Professor Louise J. Gunning-Schepers  
Chair
- Professor Ton Dietz  
Vice Chair  
Director of the African Studies Centre,  
Leiden University
- Professor Bert van der Zwaan  
Member  
Vice Chancellor of Utrecht University
- Professor Inge Hutter  
Member  
Rector of the International Institute  
of Social Studies/Erasmus University  
Rotterdam

Linda Johnson, BA (Hons), MBA,  
is Secretary to the Curatorium

## PARTICIPATING INSTITUTES

### THE INTERNATIONAL INSTITUTE OF SOCIAL STUDIES

The International Institute of Social Studies (ISS) in The Hague is part of Erasmus University Rotterdam (EUR). It is a graduate institute of policy-oriented critical social science, founded in 1952, and so able to draw on 65 years of experience.

ISS is a highly diverse international community of scholars and students from the global south and the global north, which brings together people, ideas and insights in a multidisciplinary setting. This environment nurtures, fosters and promotes critical thinking, and ISS researchers conduct innovative work into fundamental social problems. ISS offers a PhD programme, a Master's programme and various short courses. Between 300 and 400 M.A. students from more than 50 different countries study at ISS each year. The PhD community numbers over 130 researchers.

Key to the ISS philosophy and practice is the wish to make a contribution to achieving social justice and equity at a global level. ISS has strong partnerships with organisations and individuals all over the world. These partnerships make up a network in which the co-creation of knowledge and an integrated

approach to research and teaching can flourish and generate social impact.

ISS research focuses on studying political, economic and societal developments in a global context. Research is organised within four programmes: Economics of development and emerging markets; Civic innovation; Governance, globalisation and social justice; Political economy of resources, environment and population.

ISS shares expertise with a wider public by providing high-level policy advice and serving as a platform for debate and the exchange of ideas.

Further information about ISS can be found at [www.iss.nl](http://www.iss.nl)

**International  
Institute of  
Social Studies**

*Erasmus*

### UTRECHT UNIVERSITY

Utrecht University is one of Europe's leading research universities, recognised internationally for its high quality, innovative approach to both research and teaching.

Founded in 1636, the university has always focused strongly on research. Owing to its solid grounding in discipline-based scholarship, Utrecht University is at the forefront of developments in interdisciplinary knowledge. The university has chosen four strategic research themes: Sustainability, Institutions for Open Societies, Life Sciences and Dynamics of Youth.

Utrecht University participates in several international networks, including the League of European Research Universities (LERU), the International Association of Universities (IAU) and the McDonnell International Scholars Academy. Utrecht University, the University of Toronto and the University of Hong Kong (China) have joined forces to find ways of improving health in urban areas.

Utrecht University is home to 31,000 students and 6,800 staff members. Each year, more than 2,000 students and researchers come to the university from abroad.

Commitment, inspiration, ambition and independence are Utrecht University's core values. The university works collaboratively with the business sector to undertake societally relevant and innovative research.

More information can be found at [www.uu.nl](http://www.uu.nl)



**Universiteit Utrecht**



## CONTACTING THE CURATORIUM

Please address any queries to:

Linda Johnson, BA (Hons), MBA  
Secretary to the Curatorium of  
the Prince Claus Chair  
c/o ISS  
PO Box 29776  
2502 LT The Hague  
The Netherlands

Tel: +31 (0)70 426 04 96

Fax: +31 (0)70 426 07 14

Email: [curatorium@princeclauschair.nl](mailto:curatorium@princeclauschair.nl)

[www.princeclauschair.nl](http://www.princeclauschair.nl)

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HIS ROYAL HIGHNESS PRINCE CLAUS OF THE NETHERLANDS, IN HIS ACCEPTANCE SPEECH UPON RECEIVING AN HONORARY FELLOWSHIP AT THE INTERNATIONAL INSTITUTE OF SOCIAL STUDIES, 1988:

## ➤ PROPOSITION #23

'EVEN IF WE THINK OUR EXPERTS ARE MORE EXPERT WE SHOULD STILL RECRUIT AND FINANCE MORE LOCAL MANPOWER AND EXPERTISE. IT IS BETTER TO HAVE A PROJECT THAT IS TECHNICALLY ONLY 80% SUCCESSFUL BUT COMPLETELY INTEGRATED IN THE LOCAL ENVIRONMENT AND THUS SUSTAINABLE THAN ONE THAT SCORES 100% IN TECHNICAL TERMS BUT WHICH ONE KNOWS FOR CERTAIN WILL NOT BE SUSTAINABLE ONCE OUR OWN EXPERTS WITHDRAW.'

