



To the memory of Wangari Muta Maathai







Sustainable Development in Africa & Satellites

Technologies and Wisdoms

How was this book born?

Thales Alenia Space, IRD (Institut de Recherche pour le Développement), BRL ingénierie (BRLi) and ITA (Consorzio Italiano per il Telerilevamento dell'Ambiente e dell'Agricoltura) are partners within the AMESD (African Monitoring of the Environment for Sustainable Development) project. This project aims at developing adequate, space-based applications to address sustainable development issues across Africa.

Projects such as AMESD rely on the synergies between our four companies' objectives:

Thales Alenia Space, a world reference for Systems, Satellites, Instruments, equipment, space infrastructure and ground segments, designed for Telecommunications, Science, Earth Observation, Navigation, Defence and Security applications.

The company's main references in Environment monitoring are: COSMO-SkyMed, Envisat, Jason, SMOS, GMES Sentinels 1 and 3, and the Meteosat satellites for ESA/Eumetsat.

IRD, French public institution, unique in the landscape of European research for development. Its task is to conduct research in the South, for the South, with the South. Its researchers are working on issues of major global importance today as global warming, emerging diseases, biodiversity, access to water, migration, poverty, world hunger...

BRLi, an engineering company delivering consultant services and support to decision makers for sound water resources management, climate change adaptation, protection of the biodiversity and integrated coastal areas management

ITA: 33 years of experience in agricultural and environmental satellite remote sensing services.

Together, we agreed to take this opportunity to ask some of the best African experts to share their concerns and their hopes.

We teamed up with Suds-Concepts, a French communication company and selected the same book-magazine formula as for *Climate Change and Satellites*.

This book-magazine is about Africa by Africans for Africans, for worldwide deciders, and for all the people who care about sustainable development and the contribution space technology may bring.

Enjoy your reading!









Today, the duty of humanity involves first of all a duty of Africa. There is no viable future without Africa.

Foreword

Africa, continent of the future

oday, Africa is faced with many challenges—economic, environmental, human and political—that are not a fatality. For Africa, the first continent, is also the continent of the future.

In 2050, more than a billion Africans will be younger than 15 years old and one person in five will be African.

In addition to its very rich human and cultural heritage, a source of determination and creativeness, Africa has immense mining and natural resources and a prodigious ecological potential, especially with the Congo basin, the second largest green lung in the world, and its water resources.

In four decades, Africa will be both the largest market in the world and also the largest construction site in the world because everything remains to be done.



However, its development should be focused on an endogenous procedure and be part of an approach that is both sustainable and global and integrate local and traditional cultures. It goes without saying that science and the new technologies are fundamental ingredients of sustainable development. Satellites are and will be increasingly essential tools for resources management and the protection of the environment.

The book 'Sustainable Development in Africa & Satellites – Technologies and Wisdoms' shows this necessary union between tradition and modernity, between science and knowledge. Illustrating the current growth of awareness of African populations with regard to the challenges of our century, it is a platform for African women and men, for scientists, farmers, artists, for young and old, for all those who are building the future of Africa. Because Africa will be the work of the Africans themselves, first of all through work, good governance, justice and solidarity but not through charity.

I am certain that this book will shed new light on the competences, energy and deep-seated solidarity mobilised by Africans at all levels. Their actions form the leaven that will enable united Africa to construct its future.

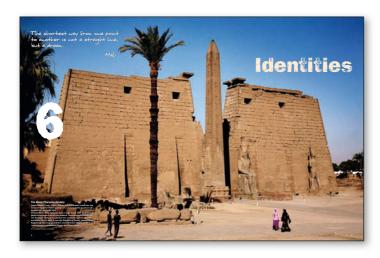
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Alpha Oumar KONARÉ

Former President of the Republic of Mali and former Chairperson of the African Union Commission



Table of contents





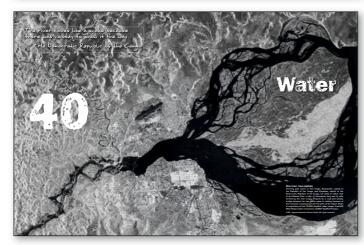
IDENTITIES

Africa's pathways	8
A drop of Africa	12
Heritage and Creation	16
From Africa to America	18

THE CONCERNS

Committed to sustainable development	24
Looking from the North	28
Indigenous knowledge	30
The calabash and the satellite	31

Relative to particular to the start of particula



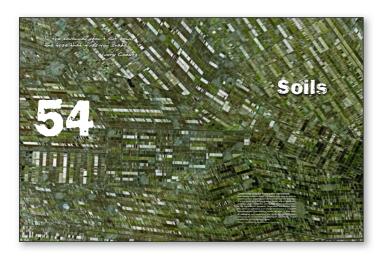
SPACE TOOLS

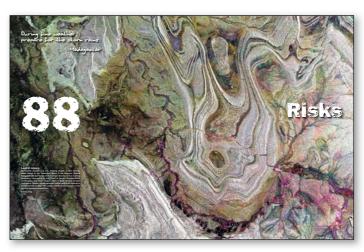
ARMC: space cooperation for developm	nent 35
From space to the Earth	36
Improving cacao production	37
Yields forecasting	38

WATER

The governance of transfrontier waters	42
Water route prospects	44
Devoted to water	45
A right for all	45
Africa's rivers and lakes	46
Ngondo, the festival of water peoples	48
Water quality survey	50
Preserving the oases	52







SOILS

Confidential data	56
Drought and remote sensing	57
Evolution of agricultural methods	59
Mineral resources mapping	60
San knowledge	62
Tradition and Modernity	64

RISKS

A world of risks and promises	90
Preventing land degradation	92
Traditional practices	94
We must unite	95
Fire monitoring	96
Education and training	97
Fires regenerate land	98

BIODIVERSITY

Biodiversity islife	66
Cheetah, lion and hyena monitoring	68
Mangroves need protection	70
Small is beautiful	72
Forests, our hope	74
Keeping an eye on bird routes	76

DECIDING

ICT for Sustainable Development	102
Capacity building and cooperation	104
Training engineers and technicians	106
Genius Loci, the spirit of a place	107
Towards a green economy	108
The empires of the mind	110
Enhancing technological capacity	112

SEAS

Coastal and marine management	80
On the watch, night and day	82
Traditional fishing evolution	84
The waves give rise to dancing	85
Coasts and altimetry	86

APPENDIX

Space missions and instruments	114
Acknowlegments	116