

Introduction

This Atlas contains essential information needed for efficient development and humanitarian actions in Somalia. It is the outcome of a synergy between cutting-edge technology and the professional, committed teamwork of many experts. The information presented showcases the results of a digital aerial photographic survey conducted in 2008. It covers an approximately 5 km wide strip along the only two perennial rivers, which feed the most important, productive and reliable crop land in southern Somalia. The Juba and Shabelle Rivers provide water for human and animal consumption, and for the agriculture practiced on the fertile alluvial plains. These riverine areas have been, and continue to be, of prime economic importance to Somalia, and deserve the special attention that SWALIM has devoted to them over the past several years.

The sheer volume of data generated by the survey made it necessary to organize the information in both printed and digital format. The Atlas therefore consists of these printed pages, and a DVD, found on the inside back cover, which contains a complete digital copy of the printed version as well as a full set of thematic maps for the entire extent of the area surveyed. It is particularly in the digital format that the versatility and detail of this information can be fully appreciated. Zoom in close to see the impressive detail that high resolution affords, and then zoom back out to see where they fit in to the bigger picture. Any initiative that deals with water and land resources in the region will benefit from the richness of this information: flood forecasting and management, irrigation water sharing, biodiversity assessment, land use planning and public infrastructure development are just a few fields of endeavor that this information will support.

The Atlas provides:

- topographic maps 80 times more accurate than the existing ones
- images in the visible range
- near infrared images
- land cover maps detailing vegetation, crops and bare lands at a previously unachievable accuracy
- river morphology showing the river channels, embankments, hydraulic structures and other features
- river cross-sections of river bed and embankments, most of which are detailed enough for design purposes
- irrigation canals and barrages
- paved and unpaved roads
- all settlements along the two rivers

The Atlas is the product of a dedicated team composed of a number of SWALIM staff, a consortium lead by Genesys International Corporation Ltd and the publisher GrafiNet Team Ltd. Its publication would not have been possible without the generous financial support of the Government of Sweden for the aerial photographic survey. The cost of the survey, unfortunately, was not just monetary, but human – in April 2008, two of Genesys' consultants, Dr. Murray Watson and Mr. Patrick Amukhuma, were abducted in the Middle-Juba region while establishing ground control points for the aerial survey. At the time of print, over one and a half years later, their fate is still unknown. We have not lost hope, however, and the dedication of this Atlas to them is the expression of our fervent wish for their safe return.

In the hope that this publication will open up new opportunities for channeling development and humanitarian assistance more efficiently to the Somali communities, I invite all readers to put the information in this Atlas to use, with the help of SWALIM if needed, and experience first-hand its benefits.



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Hordhac

Buugaan xo-khariidadeedka waxaa jira macluumaad lagama maarmaan ah oo loo baahan yahay marka la doonayo in la fuliyo hawlo horumarineed iyo kuwo beniaadamnimo gudaha Soomaaliya. Buugaan wuxuu ka dhashay wax wadaqabadka u dhexeeyey horumarka farsamada jirta iyo shaqada farsameed ee khubaro badan oo xilkas ah. Macluumaadkaan lagu soo gudbiyey bandhigidda natiijadada sahanka masawir dayaaradeedka tiroole ah (digital aerial photography) oo la fuliyey sanadkii 2008. Sahankaan wuxuu daboolayaa qiyaas dhulduuban oo ballarkiisu yahay 5km oo ku dherersan dhinacyada labda wabi ee joogtada ah oo keliya kuwaas oo biyo siiya dhulka ugu muhiimsan ee waxsoosaarka beeraha oo la iskuna haleyn karo oo ku yaal gudaha koonfurta Soomaaliya. Webiyada Juba iyo Shabeelle waxay dadka iyo xoolaha siiyaan biyo, sidoo kale waxay biyo siiyaan dhulka beereedka bacrinta ah oo ku yaal dhulka carrada biyodhigeenka siman ah. Dhulka gosha webiyada wuxuu yahay, oo uu weligiina ahaan doonaa mid ahmiyad dhaqaale u leh Soomaaliya, wuxuuna mudan yahay in fiiro gaar ah la siiyo, taas ayaana keentay in ay SWALIM ku hawlanaato dhawrkii sanadood ee la soo dhaafay.

Dhammaan mugga xogta lagu soo saaray sahanka la sameeyey waxaa lagama maarmaan ah in macluumaadka la isku duwo si laba qaab ah mid la daabacay iyo mid tiroole ah. Sidaas darteed buugga xog-khariidadeedku wuxuu ka kooban yahay bogaggaan la daabacay, iyo DVD, kaasoo laga heli karo gudaha jaldiga dambe, uuna ku jiri copy tiroole kaamil ah oo lamid ah mid la daabacay sidoo kale jumlo buuxda oo khariidado mowduucyo khuseeya dhamman baaxadda dhulka la sahmeyey. Midkaan gaar ahaan waa qaabka tiroolaha ah oo si buuxda loogu qiimayn karo waxtarka iyo faahfaahsanaanta macluumaadkaan. Si dhaw u ballaari si aad u aragtid tafaasiisha yaabka leh oo lagu heli karo marka aad wax loo bayaaniyo, hadana dic u uga noqo ballaarinta si aad u aragtid halka ay kaga aadan yihiin masawirka weyn.

Qorshe kasta oo quseeya khayraadka biyaha iyo dhulka wuxuu ka faaidaysan doonaa hodantinimada xogtaan : saadaasha fatahaadda iyo maaraynta, wadaagga biyaha waraabka, qiimaynta noolaha kala duwan, qorshaynta isticmaalka dhulka iyo horumaninta kaabayaasha bulshada waxay toos u yihiin dhowrka mowduuc oo ay xogtaan kaalmo u lahaan doonto.

Buugga xog-khariidadeedka waxaa ku siinayaa:

- naqshadaha tobogaraafiyadu oo 80 jeer in ka badan sugnaan ka fiican leh kuwa jira
- masawirada oo ah heerka muqaalka la arki karo ah
- masawiro muuqaal shucaaca cas oo dhaw (near infrared) ah
- khariidado hu'ga dhulka oo muujinaya faahfaahin dhamays tiran oo dhir, deleyo, dhul qaawan ah oo aan markii hore xaqiiqda la malaykarin
- qaab-dhismaha dhulka oo muujinaya caloolsha togga webiga, gebiyada, dhismeyaasha biyosocsiinta iyo muuqaalo kale
- jeexyada guduban ee caloosh webiga iyo gebiyada, kuwaas oo intooda badan leh faahfaahin ku filan oo ujeedooyin qorshayn leh
- keyliyo waraab iyo biyoxireenno
- waddooyinka laamiga ah iyo kuwo aan laamiga ahayn
- dhammaan degmooyinka ku dherersan labada webi

Buugga Xog-khariidadeedku waa waxsoosaarka koox aad u dadaal badan oo ka kooban shaqaalaha SWALIM, koox ay hogamaaminaysay Genesys International Corporation Ltd iyo kooxda daabacaadda GrafiNet Team Ltd. Daabacaadiisan ma suurogasheen haddii ayan jirin deqsinimao ah kaalmada dhaqaale oo ay ku deeqday Dawladda Iswiidhen (Sweden) qabashada hawsha sahanka masawir dayaaradeedka. Kharajka sahanku, nasiidarro, ma ahayn mid dhaqaale uun ah, laakiin dad ayaa ku jirey – bishii Abriille 2008, oo ah labo khabiir oo ka tirsanaa hay'adda Genesys, Dr. Murray Watson and Mr. Patrick Amukhuma, kuwaasoo loogu afduubtay gobolka Jubada Dhexe ayagoo fuliyana hubin dhul baariseed oo ay u samaynayaan sahanka hawada sare. Waqtiga daabacaadda, oo hal sano iyo bar ka dib ah, lama oga sida xaalkoodu yahay. Ma aanan rajo dhigin, si kastaba ha ahaatee, Buugga xog-khariidadeedkan oo iyaga loo hibeeyo waxay ka tarjumaysaa inaan aad u jecelnahay inay soo noqdaan ayagoo nabad qab ah.

Ayadoo la rajeynayo in ay daabacaaddan waddooyin cusub u furi doonto horumarinta iyo kaalmada beniaadamnimo si aad waxtar ugu leh bulshada Soomaaliyeed. Waxaa ku casumayaa dhammaan aqristeyaasha inay ku isticmaalaan xogta ku jirta buuggaan xog-khariidadeedka, adinkoo kaashanaya SWALIM haddii loo baahdo, iyo waayoaragnimadeeda oo faaido leh.



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