

Name: HUTCHEON, A Austin **Date of birth:** 20.01.1941

Profession: Soil Scientist / Land Use Planner

Years overseas experience: 37 **Nationality:** British

Key qualifications:

Countries worked: Bhutan, Indonesia, Iraq, Jordan, Malawi, Nigeria, Oman, Saudi Arabia, Sudan and UK.

Disciplines: Project management, budgeting, accounting, human resource development, database management and development, information technology, geographic information systems (GIS), geographic positioning system (GPS) mapping, desalinisation and land reclamation, remote sensing, environmental land use mapping / monitoring, training, computing, accounts / invoicing, stores, soils, soil and land classification systems, laboratory, agricultural land classification, pedology, mechanics / vehicle / plant, adaptive research, vertisols.

Soil scientist/land use planner with experience, since 1962, as Research Assistant in Aberdeen University and working overseas since 1969 in Africa, the Middle East, Asia and South East Asia. Fields of work have included routine environmental survey, salinity surveys and reclamation, setting up and running field trials as part of adaptive research programmes plus capacity building for national soil survey organisation. Collaborating with agronomist and extension specialists in development of extension messages, supervising land use planning studies for settlement schemes, managing, developing and utilising computerised database (DBMS & GIS) systems for land classification and institution building through staff training.

- Wide experience of the logistics of projects, including management, stores procurement and organisation; vehicle requirements, servicing and monitoring of use; project accounts and invoicing - normally through computerised spreadsheets
- Involved in organising and executing several large routine surveys;
 1. *National Soil Map and Land Use Project (Jordan, 1989-95)*
 2. *Umm er Radhuma study (Saudi Arabia, 1977-80)*
 3. *Central Nigeria Project (Nigeria, 1969-77).*

The former studies involved living and working in extremely remote desert areas, mapping at land systems to detailed scales many various arid soils including those with extreme levels of salinity, gypsum and calcium carbonate, and supervising and training technical and support staff. On the National Soil Map and Land Use Project, compiled the stores requirement, liaised with the procurement and shipping agencies to supply the equipment, assisted with database design and utilisation for mapping and laterally managed the project including final reporting and project closure

- Conducted on-the-job training for local staff on several projects, including:
 1. *the methodology and logistics of executing land use and soil surveys*
 2. *training staff to design and use computer compatible data recording systems*
 3. *the use of project designed software and routines for land use mapping and monitoring*
 4. *arranging, designing and presentation of training courses*
 5. *use of GPS and GPS software for map construction and mapping*
- Designed, installed and monitored tillage and water harvesting trials in West Darfur Sudan in programme of development of extension methodologies for arid area cultivation
- Designed and installed water harvesting interventions for tree growth and land reclamation in arid areas
- Co-operated with local farmers in study of cultivation techniques for rationalisation of advice for inclusion in extension messages in both humid tropics and arid zones
- Designed a system for assessing and recording the quality and reliability of maps produced via traditional and digital processes in Indonesia with the aim of establishing a system for quality control within the National Land Agency / Badan Pertanahan Nasional (BPN)
- Recent experience, working in co-operation with Information Systems / Computer Specialist, of the design requirements, use and management of GIS / DBMS systems in:
 1. *Jordan – JOSCIS - Jordan Soil and Climate Information System (NSM&LUP, 1989-95)*
 2. *Indonesia – ILUD - Indonesian land Use Databank (LREPP, 1996-97)*
 3. *Bhutan – BHUSOD - Bhutan Soil Databank(2001 – 2003)*
 4. *Sudan –MDIUP Merowe Dam Implementation Unit, Soil Survey and Land Classification for irrigation*
- Produced reports for all assignments undertaken and often tasked with editing and re-writing other reports. Updated Soil Survey Manual for Bhutan plus designed soil classification and land evaluation systems
- Environmental monitoring and mapping of vegetation, land use and soils in Indonesia, Jordan, Sudan and Malawi and supervision of planning sustainable development of settlements in Kalimantan, Indonesia and Sudan

Education: M.Sc. Soil Science (Aberdeen), 1967
B.Sc. Soil Science (Aberdeen), 1962

<u>Membership of:</u>	British Society of Soil Science (BSSS) Institute of Professional Soil Scientists (IPSS) NSRI, Silsoe Campus, Cranfield University, UK (Visiting Fellow)
<u>Computer literacy:</u>	Operating Systems: DOS / Win95 / 98 / 2000 and XP Word Processing: MS Office 97 / 2000 / XP for Windows 95 / 98 / 2000 / XP Database: Dbase IV, MS Access Spreadsheet: Lotus 123R3, Microsoft Excel within MS Office suites GIS: ArcInfo (ArcGIS 8.3) and Ozi Explorer (GPS mapping).
Experience record:	
1996 - Present	Freelance on early retirement from HTS Ltd relocated to New Zealand 2004 Now actively engaged in running coaching at Taupo Harrier Club, tramping with the Taupo Tramping Club where GPS is being promoted and sometimes get called out to assist with mapping for the local Search and Rescue (LANDSAR). Several books have now been compiled and published on tramping in New Zealand and on GPS use.
INDONESIA 2005 - 2006	Earthquake & Tsunami Emergency Support Project (ETESP) Uniconsult (UCIL)
Oct – May	Six months input on ETESP (October – December) on agriculture component of ADB funded ETESP with aim of reclamation and rehabilitation of the soils of the area to assist recovery of agriculture post-tsunami in Northern Sumatra. Analysed all available salinity data (EM38 surveys) from the north and east coasts plus collected new field data, designed tools and reclamation programmes appropriate for situations found to exist. Described scenarios covering all noted situations caused by tsunami damage on north, east and west coasts. Cooperated with and assisted several NGOs (Red Cross, Oxfam etc) with land and soil problems plus carried out studies to assist the ETESP Irrigation and Drainage component including analysis of available laboratory data of post-tsunami samples. Designed “Land and Soil Problem Assessment” tool covering tsunami damages and consequences. Information and reports etc largely available on the web: WWW.austinhutcheon.com/etesp
(ADB)	
NEW ZEALAND 2005	Training Course Practical First Aid, Red Cross, NZ
May	Two day course on first aid techniques and procedures meeting NZQA Unit Standards 6402, 6401 and 6400. Course covered all the basics for recognising life threatening situations and emergencies, decision making for action and requisite actions for safety, identification of injuries / medical condition, assessing seriousness of these injuries, managing the casualties by application of First Aid techniques and monitoring the casualties until more qualified help arrives.
NEW ZEALAND 2005	Training Course Essentials of Humanitarian Practice, RedR, NZ
March	
(Self Financed)	One week residential course covering the essential aspects of Humanitarian Practice for working with refugees etc in emergency situations. Subsequently placed on the RedR register - http://www.redr.org.nz - as a qualified expert and member of RedR New Zealand.
ITALY 2004	Soil Map of Jordan EU, Joint Research Centre, Ispra, Italy
October	
(EU)	Invited, as NSRI staff, to supply data and expertise input in connection with the compilation of the 1:1,000,000 scale Soil Map of Jordan to help complete the European Soil Bureau (ESB) soil map of the Mediterranean countries. During 3 day input helped identify workable routine to enable digital format of the new map and developed map legend using the World Reference Base (WRB) classification system by correlation with the USDA (1975) legend used in the 1:750,000 scale map produced by the EU funded National Soil Map and Land Use Project, Jordan 1989 – 1995.
SUDAN 2004	Land-use Specialist Merowe Dam Semi Detailed Soil Survey
06 Sept – 15 October	Six weeks in northern Sudan in Multaga – Dongola area of Nubian Desert:
Lahmeyer International	<ul style="list-style-type: none"> • Supervised soil survey executed by staff of Land & Water Research Centre of Wad Medani for the Merowe Dam Implementation Unit on contract to Lahmeyer International • Checked field descriptions of soil profile pits in the field and checked soils descriptions produced - adding mapping codes and soil series before passing for data entry in field camp • Rebuilt, collated and developed the draft database compiled in MS Excel to allow generation of physical land suitability for the point-data (8,000+ auger observations and 140 profile pits) via look-up tables covering gravity, overhead and irrigation drip systems • Drafted routine for use via GIS to increase ease of production of soil maps and developed routine for GIS production of Land Suitability maps for gravity, overhead and drip irrigation • Collected all laboratory data, collated, checked and added to the database • Finally recompiled full database in MS Access with view to incorporation into the FAO database SDBm via import routines.

UK
2004
Jul – November
(CRANFIELD
UNIVERSITY)

Visiting Fellow
National Soil Resources Institute, Silsoe Campus, Cranfield University, UK

Twelve months appointment as a "Visiting Fellow" assigned to the National Soil Resources Institute (NSRI) at Silsoe Campus, Cranfield University. Activities included being a reviewer and data-input to the WOSSAC database – a global archive for existing soil surveys - and advising and assisting staff of the college in the course content for trainee Bhutanese soil surveyors.

Laterally located and collated all available data for use at the EU, Joint Research Centre (JRC) Ispra in connection with the compilation of the Soil Map of Jordan.

UK
2004
Mar – April
(DANIDA)

Training Course in ArcGIS and Database
National Soil Resources Institute, Silsoe Campus, Cranfield University, UK

Six weeks hands-on course funded by Danida on GIS (ArcGIS 8.3) and database compilation. In-house tutorial course on basic use of GIS software as introduction to ArcGIS and transfer of BHUSOD (Bhutan Soil Databank) data from MS Access database to SDBm the FAO, "off-the-shelf", system via queries in MS Access and various data-cleaning routines. Outputs included a working copy of SDBm with the Bhutan data and draft GIS soil maps of the Punatsangchhu semi-detailed area – both items being passed on to Bhutan Soil Survey along with routines to clean the data in BHUSOD.

BHUTAN
2001- 2003
Jan – till Dec 03
(DANIDA)

Soil Survey Specialist
Environmental Sector Programme Support

Working as a Danida Adviser within the Environmental Sector Programme Support (ESPS) and attached to Bhutan Soil Survey (BSS) of the National Soils Services Centre (NSSC) of the Ministry of Agriculture, Thimphu, Bhutan capacity building of soil survey unit. Advised and assisted staff in connection with advanced overseas training.

In conjunction with local staff:

- designed and set up soils database (Bhutan Soil Databank – BHUSOD)
- designed land evaluation / suitability classification system based on FAO with spreadsheets to do assessments based on input of locally determined data
- designed system for soil classification based on local parameters and use of BHUSOD data
- initiated use of GPS for map construction and GIS system for mapping
- compiled technical working papers describing BSS systems and updated the Soil Survey Manual for Bhutan based on the working papers
- trained local Bhutanese staff in the use of all the systems for use on execution of soil surveys, specialised studies and reporting

Supported the National Programme Director with:

- Budgeting and accounting by working with the NSSC accountant – reconciled Danida funding with annual audits for life of project / programme
- Annual and technical reporting including design of streamlined report layouts
- Advised on equipment needs and purchasing plus designed and inaugurated computerised equipment inventory

JORDAN
2000
July - December
(EEC)

Project Adviser
Jordan Arid Zone Productivity Project (JAZPP) Extension

Co-ordinate on-farm testing of recommended production techniques, developed under the original JAZPP studies (1995-98), in collaboration with University of Jordan and Ministry of Agriculture staff under Silsoe College, Cranfield University UK. Development of extension methodology based on field trials and inter-relationships with participating farmers.

Activities included:

- Design of system for selection and assessment of suitable sites for on-farm tests
- Training counterparts in site selection and assessment in the field
- Design system for monitoring on-farm tests
- Training Field Officers in monitoring routines
- Design of computer compatible field record forms for:
 - site assessment and selection
 - monitoring of interventions once installed
- Design of database to record all monitoring data
- Assist Project manager with administrative matters relating to technical and contractual arrangements
- Assist with compilation of Working Group to develop Extension Messages

UK
1999 - 2000

August - June

Helpdesk Operative
Computer Centre Open University, UK

Manning the Network helpdesk in the Computer Centre within the Open University, Milton Keynes, UK. This helpdesk logged all problems with telecommunications, hardware and network operations within the OU establishments throughout the UK. Input all problems into databases and forwarded to relevant engineers when necessary, otherwise advised directly.

Compiled Web Based help system for Helpdesk users detailing all necessary routines and procedures.

UK
1997 - 1999

Jul - Jun

(Private)

Proposal Preparation
Private Invitation

Working from home and with hardcopy etc of published reports and maps compiled a proposal for Minister of Agriculture, Jordan in response to invitation from the Minister for further development of a recent installation. Proposal included site visits, work and staff schedules plus financial requirements for staff and equipment. Proposal revisions carried out following site visit and comments from Client.

INDONESIA
1996 - 1997

April - June

(ADB)

Landuse Specialist, GTZ
LREPP II / B

Based in Samarinda, Kalimantan Timur, as Landuse Specialist and Regional Manager for Kalimantan, for the second Land Resources Evaluation and Planning Project with GTZ. Working with a local consultant strengthening the Regional and Provincial staff of BPN (Badan Pertanahan Nasional / National Land Agency) with modern, computerised methods of landuse mapping, including use of database, API, Satellite Imagery, Arc/Info and ERDAS materials.

- Helped design and present On-the-Job Training courses in the Provinces of Kalimantan and Sulawesi to government staff in the use of project designed methodologies in the field and on computer.
- Developed a system for Assessing and Recording the reliability of the Land Use Maps produced by Project with the aim of designing Quality Control procedures for the Client. Introduced senior staff to Quality Control checking procedures.
- Significant input in Final Report design and production.

1977- 1996

Hunting Technical Services Limited

JORDAN
1993-95

September-September

(EEC)

Project Manager
National Soil Map and Land Use Project

Managed the project during the Level II (semi-detailed) and Level III (detailed) studies. This included:

- liaison with the land use planner, senior counterparts and computer programmers in development of computerised land suitability mapping.
- assisting and guiding local staff with land cover mapping from satellite imagery and aerial photographs
- technical supervision of routine soils and land cover surveys and responsibility for management of the DBMS and GIS systems.
- liaison with the Client and recommendation of areas to be studied
- liaison with and supervision of the RJGC in production of base maps (from imagery and existing topographic maps) and final drawing of soils, land cover and land suitability maps.
- Management of the transport fleet of diesel Land Rovers including servicing and repairs, recording and analysis of running costs etc.
- Design of overseas training courses, with help of HTS UK, for project staff around identified learning requirements and wishes of staff.
- financial and personnel management, and negotiations with Client and Funding Agency on Project funding, invoicing etc.
- writing and editing final reports plus liaison with local firm in having reports and map albums printed and bound

JORDAN
1989-93

September-September

(EEC)

Senior Pedologist
National Soil Map and Land Use Project

Detailed and organised the purchase and shipping of all project equipment prior to start-up of project. Supervised organisation of all stores and vehicle servicing, recording all data on computerised spreadsheets.

Organised the logistics of the nation-wide survey and undertook routine fieldwork during the Level I (Reconnaissance / Land System) and Level II (Semi-detailed) studies and assisted with the on-the-job training of Jordanian pedologists.

Assisted the computer specialist in designing computer compatible field data record-cards and the DBMS content. Used the DBMS for data retrieval, and recommended developments in the system, whilst assisting with reporting the Level I studies.

**SUDAN
1986-88**

September-July
(ODA)

**Land Use Planner/Team Leader
Western Savannah Project, Phase II**

Initially totally re-organised, catalogued and expanded database materials consisting of maps, air-photos and satellite imagery. Analysed all existing soils laboratory data and established fertility levels, deficiencies, toxicities and correlations with soil physical parameters. Follow-up studies included:

- Installed, monitored and analysed tillage trials, including water-harvesting and amelioration inputs, on compacted alluvial (Naga'a) and capped, degraded Basement Complex soils in efforts to improve crop (sorghum) yield and re-establish fodder grass and trees. (LUP notes 3/88, 4/88 and 10/87)
- Tested various liming material on the very acidic, sandy Qoz soils and assisted in the design of field trials using local materials and cultivation methods.(LUP notes 1/88 5/88 and 5/87)
- Co-operated with agronomist and extension specialist to develop extension messages based on the findings and analysis of the adaptive trials.
- LANDSAT and SPOT imagery obtained and used for monitoring land use and vegetation change and for land use planning pilot studies.
- Designed survey form for determining requirement for new water-yards and setting criteria for decision-making. (LUP note 5/88).

**INDONESIA
1984-86**

July-June
(IBRD)

**Land Use Planner / Regional Adviser
Transmigration Settlement Planning**

Stationed in Pontianak, West Kalimantan and, as Regional Adviser, responsible for supervision of two large groups of foreign and local consultants (approximately 50 staff) undertaking surveys and studies for the planning of new areas for transmigration development. Responsible for supervision of:

- Soil surveys; topographic surveys; forestry surveys and inventories; settlement planning and infrastructure (roads and bridges) and access to local markets, and
- Assisted with staff training and report presentation as and when requirements identified

Liaison with technical, administrative and advisory staff including:

- Central Advisory Group (Transmigration), progress & review of Consultants' reports.
- Team Khusus, DG Estates (land suitability estate crops - areas not suitable for conventional Transmigration sites, but suitable for trees, used up by DG Estates.
- PPT Bogor, regarding soil analysis and soil fertility.
- Local (Provincial) Project Officer regarding Consultant's performance, site visits and reporting status etc.
- Provincial and local government departments (Agriculture, Forestry, Transmigration, Planning etc) for monitoring and mapping of regional and local land allocation for nucleus and smallholder estates, areas under and planned for transmigration settlement and existing and planned infrastructure, including road alignments etc. Supervised and co-ordinated production of Provincial Land Allocation Map from the collected data

**MALAWI
1983**

June-December
(EEC)

**Team Leader
SLADD Land Use Planning Study**

Procured materials and transport, organised accommodation and offices for team and planned logistics. Carried out soils field checking and assisted with API and mapping of findings. Correlated reporting and report production.

**INDONESIA
1982-83**

November-May
(ODA)

**Soil Scientist/Land Use Planner
Greater Yogyakarta Groundwater Study**

Studied areas of volcanic soils with a known shortage of irrigation water and evaluated the soils for irrigation. Some 20,000 hectares of semi-detailed survey followed by 240 hectares of detailed study in proposed tubewell command areas. Infiltration rates in a wide range of soil types enabled land suitability classification to be carried out. Trained counterpart staff in soil survey methodology, soil physics studies and techniques.

Worked closely with irrigation engineers and farmers in attempts to determine the best cultivation procedures to be used for most efficient water use - allowing the irrigation engineers to produce more accurate quantities of water that would be used.

Extension staff then incorporated findings into advice for wider use.

**OMAN
1982**

February-June
(GOVERNMENT)

**Soil Scientist
Oman Soil Surveys**

Detailed soil survey of 2,400 hectares where the FAO systems were used for soil and land classification. Several soil monoliths collected for the client and four for the International Soil Museum, Wageningen. A complete photographic record of the natural vegetation in the survey areas was compiled.

**IRAQ
1981**

April-August

(GOVERNMENT)

**Soil Scientist
Greater Mussayib Project**

Carried out investigations directed towards the re-evaluation and re-planning of this large irrigation scheme. Studies included re-interpretation of existing soil surveys and production of land classification mapping, soil sampling for laboratory determination of salinity and sodicity, deep augering (5m) to assess drainage characteristics and infiltration tests, surface and sub-surface. Areas unsuitable for intensive irrigated agriculture identified and the methodology for reclamation of saline soils set up.

**UK
1981**

4 - 8, Mar

**SAUDI ARABIA
1977-80**

September-March

(GOVERNMENT)

**Silsoe College
Short courses on Irrigation and Drainage**

**Soil Scientist/Team Leader
Umm Er Radhuma Project**

Led ten to fifteen-member survey teams in, mainly, extremely remote areas of the Eastern Province. Specific areas studied were the old established Bedouin centre at Jabrin (extremely gypsic soils), Wadi as Sabha (calcic and gypsic soils), large areas of gravel plain south of Haradh and Al Hasa Oasis (extremely calcic soils). In each area, established self-sufficient tented camps and set-up vehicle workshops.

Undertook routine survey in all areas as well as training new staff in all aspect of soil survey. Carried out soil (USDA) and land classification (USBR) and mapping. Assisted senior soil scientist with the final reporting and map checking of the whole project before assisting with the logistics of project close down.

Experience prior to joining Hunting Technical Services Limited

NIGERIA
1969-77
(ODA)

Soil Surveyor
Central Nigeria Project

Attached to the Land Resources Division of the ODA carrying out routine survey in central and northern Nigeria. Worked in the semi arid environment of the north and in the moist regime in the south of the Benue Valley. Acquired experience in the organisation of field teams and the related logistical problems. Also responsible for arranging and accounting for local funding through governmental agencies.

UK
1962-69

Research Assistant
Department of Soil Science, University of Aberdeen

Research assistant in the Soil Science Department where he gained his M.Sc. whilst also carrying out routine analyses of soil samples and specialised analyses on soil organic matter, including gas chromatography techniques. Also involved in organising and running laboratory classes for undergraduate and post-graduate students.

LANGUAGES:

	Speaking	Reading	Writing
English (mother tongue)	Excellent	Excellent	Excellent
French	Poor	Poor	Poor
Bahasa Indonesia	Basic	Basic	Basic

Contact Address:

52 Tui Street
Taupo 2730
New Zealand

Permanent Contacts:

Tel / Fax NZ +0064 7 376 9319
NZ mobile 0064 21 297 1035
email Hutcheon@slingshot.co.nz
Austin_overseas@Hotmail.com
url <http://www.austinhutcheon.com>

Signature of Staff Member:

Date:

Additional Qualification:

Level 2 Group Event Athletics Coach (UK Athletics)
Level 1 Coach Athletics New Zealand

Leisure Pursuits:

- Running
- Cycling
- Golf
- Hill walking / trekking

Books and Manuals on Tramping and GPS use

Title	Content	Information
<p>SHORT DAY TRAMPS FROM TAUPO</p> <p>Paperback ISBN 978-0-473-15262-8 PDF Download ISBN 978-0-473-15263-5</p>	<p>Tramps that take up to 4 hours and on recognised, way-marked trails which are well known and documented. One or two are in areas with little DoC presence and follow poorly marked hunters' tracks. Several are suitable for those new to tramping, beginners and supervised children.</p>	<p>Number of Tramps: 22 Number of Pages: 68</p> <p>Paperback – full colour Quarto Download – PDF file</p> <p>Available on-line at: www.lulu.com/content/2291814</p>
<p>LONGER DAY TRAMPS FROM TAUPO</p>	<p>Tramps that take in excess of 4 hours with some being easy but most are in the moderate to fit category – mainly due to distance covered and time involved but some do have technical challenges. Mostly on well recognised, way-marked tracks but some are on small tracks established by hunters and those scraping a living in the bush.</p>	<p>Number of Tramps: 49 Number of Pages: 153</p> <p>Paperback – full colour Quarto Download – PDF file</p> <p>Available on-line at: www.lulu.com/content/2284738</p>
<p>DAY TRAMPS outwith THE TAUPO AREA</p>	<p>Tramps that are accessible from Taupo as day walks but can involve roads trips of up to 2 hours to the start and / or return. Some are A to B walks through areas such as the Whirinaki from Plateau Road to Minginui and do require a “bus or car” mover to drop trampers at the start then pick up the far end.</p>	<p>Number of Tramps: 17 Number of Pages: 53</p> <p>Paperback – full colour Quarto Download – PDF file</p> <p>Available on-line at: www.lulu.com/content/2329968</p>
<p>SELECTION of OVER-NIGHT TRAMPS in the North & South Islands, NZ</p> <p>Paperback ISBN 978-0-473-15178-2</p> <p>PDF Download ISBN 978-0-473-15179-9</p>	<p>These selected overnight tramps involve staying in huts or camping on the trail and most certainly mean carrying a backpack fully loaded with gear and food. Several of these tramps can be done as day walks but do present the opportunity to stop out overnight, usually in some comfort.</p>	<p>Number of Tramps: 31 Number of Pages: 143</p> <p>Paperback – full colour Quarto Download – PDF file</p> <p>Available on-line at: www.lulu.com/content/2368761</p>
<p>Tramping in the Central North Island New Zealand</p> <p>Paperback ISBN 978-0-473-15061-7</p> <p>PDF Download ISBN 978-0-473-15062-4</p>	<p>Description of virtually all the tramps done in the past few years by the Taupo Tramping Club (TTC) in and around the Central North Island plateau. This update of the original 2007 publication includes more accurate GPS data with that data presented on topographic maps and Google Earth imagery.</p>	<p>Number of Tramps: 81 Number of Pages: 229</p> <p>Paperback – full colour Quarto Download – PDF file</p> <p>Available on-line at: www.lulu.com/content/2420267</p>
<p>GPS and GPS Software for use in New Zealand</p> <p>Paperback ISBN 978-0-473-14909-3</p>	<p>An attempt to document set-up and routines for using Garmin GPS Units in New Zealand and the GPS Software OziExplorer. In particular the set-up for displaying maps with the new NZTM – New Zealand Transverse Mercator - is detailed.</p>	<p>Available on-line at: www.lulu.com/content/6364888</p>

Technical Reports and Papers

Country	Year	Title	Present location of document
Indonesia	2006	Land and Soil Problem Assessment, ETESP, Background Paper / Tool	www.austinhutcheon.com/etesp and or email the author
Indonesia	2006	Soil Texture and PSC ETESP, Background Paper	www.austinhutcheon.com/etesp and or
Indonesia	2006	Soil Conditions for Wetland Rice ETESP, Background Paper	email the author
Indonesia	2006	Sandy Sediments ETESP, Background Paper	www.austinhutcheon.com/etesp and or
Indonesia	2006	Digital Maps ETESP, Background Paper	email the author
Indonesia	2006	Irrigation Sites – Sand Surveys ETESP Site Visit Report	www.austinhutcheon.com/etesp and or
Indonesia	2006	Lhamno Irrigation Sites ETESP Site Visit Report	email the author
Indonesia	2006	Red Cross Site, Aceh Besar ETESP Site Visit Report	www.austinhutcheon.com/etesp and or
Indonesia	2006	Oxfam Site, Calang, Aceh Jaya ETESP Site Visit Report	email the author
Indonesia	2006	Field Tour Report, NAD Areas, February 2006 ETESP Site Visit Report	www.austinhutcheon.com/etesp and or
Indonesia	2006	Detailed Study of Laboratory Data ETESP Technical Data Report	email the author
Indonesia	2006	Interpretation of Laboratory Data for ETESP Irrigation and Drainage ETESP Technical Data Report	www.austinhutcheon.com/etesp and or
Indonesia	2006	Labdata Summary ETESP Tool (MS Excel)	email the author
Indonesia	2006	Site Monitoring Tool ETESP Tool (MS Excel)	www.austinhutcheon.com/etesp and or
Indonesia	2006	Auger Description Form ETESP Tool (MS Excel)	email the author
Indonesia	2006	HRD Database, Training Needs ETESP Tool (MS Access)	www.austinhutcheon.com/etesp and or
Indonesia	2006	Labdata Collation ETESP Tool (MS Excel)	email the author
Indonesia	2006	Land & Soil Problem Assessment ETESP Tool (MS Excel)	www.austinhutcheon.com/etesp and or
Indonesia	2005	ETESP Soil and land Reclamation Scenarios ETESP Technical Data Report	email the author
Indonesia	2005	ETESP 2005 Executive Summary, Soil and Land Reclamation ETESP Technical Data Report	www.austinhutcheon.com/etesp and or
Indonesia	2005	Bireuen Kabupaten, Data Assessment and Soil Reclamation ETESP Technical Data Report	email the author
Indonesia	2005	Pidie Kabupaten, data Assessment and Soil Reclamation ETESP Technical Data Report	www.austinhutcheon.com/etesp and or
Indonesia	2005	Aceh Besar Kabupaten, Data Assessment and Soil Reclamation ETESP Technical Data Report	email the author
Indonesia	2005	Banda Aceh Kota, Data Assessment and Soil Reclamation ETESP Technical Data Report	www.austinhutcheon.com/etesp and or
Indonesia	2005	Desalinisation and Soil Improvement Mobilisation Report ETESP Technical Data Report	email the author
Indonesia	2005	Annual and Monthly Rainfall ETESP Background Paper	www.austinhutcheon.com/etesp and or
Indonesia	2005	Soil Acidity and Aluminium ETESP Background Paper	email the author
Indonesia	2005	BRR Area at Lhoong, Aceh Besar ETESP Site Visit Report	www.austinhutcheon.com/etesp and or

Indonesia	2005	Blang Kreung Site, Aceh Besar ETESP Site Visit Report	email the author
Indonesia	2005	ECe from EM38 Data ETESP Tool (MS Excel)	www.austinhutcheon.com/etesp and or
Indonesia	2005	Leaching Water Requirements ETESP Tool (MS Excel)	email the author
Indonesia	2005	Irrigation Leaching Progress ETESP Tool (MS Excel)	www.austinhutcheon.com/etesp and or
Indonesia	2005	Survey Density ETESP Tool (MS Excel)	email the author
UK	2004	Import of BHUSOD (Bhutan Soil Databank) Data from MS Access into SDBm (FAO Multilingual database) <i>Selected Routines</i>	www.silsoe.cranfield.ac.uk/nsri
BHUTAN	2003	Soil Survey Manual for Bhutan Version 3 (Following update of version 2) NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 30 BSS Systems (<i>Collection of working spreadsheets as used in BSS WPs, on CD ROM</i>) NSSC, MoA	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 29 Area Measurement NSSC, MoA	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 28 Water Harvesting NSSC, MoA	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 27 Field Guide Card (<i>for use with computer compatible description cards</i>) NSSC, MoA	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 26 Climatic Zones NSSC, MoA	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 25 Land Conversion (Swapping) NSSC, MoA	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 24 Computer Maintenance NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 23 Soil Colour and Drainage Classes NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2003	BSS Working Paper 22 BSS Timesheets NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 21 Survey Plans and Scales NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 20 Soil Moisture - AWHC NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 19 Coordinates Template NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 18 Soil Horizons, Layers and Diagnostics NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 17 Computer Compatible Field Data Recording Cards NSSC, MoA / Danida	nssc@druknet.bt or email the author

BHUTAN	2002	BSS Working Paper 16 Interpretation of Soil Analytical Data NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 15 Soil Texture & Particle Class NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 14 Slope, Aspect and Gradient NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 13 Mapping NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 12 Map Construction with GPS NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2001	BSS Working Paper 11 Structural Stability NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2001	BSS Working Paper 10 Soil Acidity and Aluminium NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2001	BSS Working Paper 9c Land Evaluation and Classification NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2002	BSS Working Paper 4 BHUSOD – Bhutan Soil Database NSSC, MoA / Danida	nssc@druknet.bt or email the author
BHUTAN	2001	BSS Working Paper 3c Soil Series 2001 (Soil Classification System for Bhutan) NSSC, MoA / Danida	nssc@druknet.bt or email the author
JORDAN	2000	Jordan Arid Zone Planning Project JAZPP Extension June 2000 – June 2001 Final Report (Draft – for completion by local staff) MoA / University of Jordan / EU	Ministry of Agriculture, Amman, Jordan And Department of Agriculture, University of Jordan
JORDAN	2000	Jordan Arid Zone Planning Project JAZPP FIELD OFFICER TRAINING COURSE MoA / University of Jordan / EU	Ministry of Agriculture, Amman, Jordan And Department of Agriculture, University of Jordan
JORDAN	2000	Jordan Arid Zone Planning Project JAZPP Extension June 2000 – June 2001 START-UP WORKSHOP MoA / University of Jordan / EU	Ministry of Agriculture, Amman, Jordan And Department of Agriculture, University of Jordan
JORDAN	1998 / 9	National Soil Map and Land Use Project, Proposals for Development 1998 - 2001. A costed proposal for upgrading the JOSICIS System.	Wossac – www.Soil-net.com
INDONESIA	1997	Guidelines for Using the Work Progress and Quality Assessment Checklist. Final (Regional) Report [Draft], Region 2, Kalimantan. Creation of Shortcuts in MS Office 95 for use with Specific Programmes. GTZ	Wossac – www.Soil-net.com
JORDAN	1995	The Soils of Jordan. Level 3 Detailed Studies. - Soils, Land Use and Land Cover. (Main Report) - Soil Physics. - Argillic Horizons and Thin Section Studies. Hunting Technical Services Limited.	Wossac – www.Soil-net.com Email the author for digital copy

JORDAN	1994	The Soils of Jordan. Summary Report Level 2 Semi Detailed Surveys.(Main Report) Hunting Technical Services Limited.	Wossac – www.Soil-net.com
JORDAN	1993	The Soils of Jordan. Summary Report Level I Reconnaissance Soil Survey.(Main Report) Hunting Technical Services Limited.	Wossac – www.Soil-net.com
JORDAN	1990	Technical and administration notes for field staff. National Soil Map and Land Use Project. Hunting Technical Services Limited.	HTSPE UK
SUDAN	1988	Western Savannah Development Corporation. Land use planning section annual report. Appendices - land use planning notes. Overseas Development Administration. Hunting Technical Services Limited.	WSDC Nyala Western Darfur Sudan
SUDAN	1986	Western Savannah Development Corporation. Inception Report by the land use planner. Overseas Development Administration. Hunting Technical Services Limited.	WSDC Nyala Western Darfur Sudan
INDONESIA	1986	Transmigration settlement planning advisory group. Regional advisers annual report. International Bank for Reconstruction and Development. Hunting Technical Services Limited.	Wossac – www.Soil-net.com
MALAWI	1983	SLADD land use plan. European Economic Community. Hunting Technical Services Limited.	Wossac – www.Soil-net.com
INDONESIA	1983	Greater Yogyakarta groundwater resources study. Soils and land capability. Overseas Development Administration. Mott MacDonald International.	Wossac – www.Soil-net.com
OMAN	1982	Oman Soil Surveys. Detailed soil and groundwater survey and land capability classification of the Buraimi, Kamil-Wafi and Wadi Quriyat areas. Ministry of Agriculture and Natural Resources. Hunting Technical Services Limited.	Parts on: Wossac – www.Soil-net.com
IRAQ	1981	Greater Mussayib Project. Annex 1:Landform and Soils. Iraqi Government. Binnie & Partners / Mott MacDonald and Partners / Hunting Technical Services Limited.	Wossac – www.Soil-net.com
SAUDI ARABIA	1980	Umm er Radhuma study. Detailed soil survey of Al Hasa ADC. Government of Saudi Arabia. Groundwater Development Consultants.	Wossac – www.Soil-net.com
SAUDI ARABIA	1980	Umm er Radhuma study. Semi detailed soil survey and land classification of the Al Hasa Oasis. Government of Saudi Arabia. Groundwater Development Consultants.	Wossac – www.Soil-net.com

SAUDI ARABIA	1980	Umm er Radhuma study. Semi detailed soil survey and land classification of the Hanidh area. Government of Saudi Arabia. Groundwater Development Consultants.	Wossac – www.Soil-net.com
SAUDI ARABIA	1979	Umm er Radhuma study. Semi detailed soil survey and land classification of the Harad Farm and area. Government of Saudi Arabia. Groundwater Development Consultants.	Wossac – www.Soil-net.com
SAUDI ARABIA	1978	Umm er Radhuma study. Semi detailed soil survey and land classification of the Jabrin Oasis. Government of Saudi Arabia. Groundwater Development Consultants.	Wossac – www.Soil-net.com
NIGERIA	1978	Environmental Aspects of the Kano Plains. Land Resources of Central Nigeria. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1977	Environmental Aspects of the Kaduna Plains. Land Resources of Central Nigeria. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1977	Soils and landform of the Kano Plains, reconnaissance study, Central Nigeria project. Federal Ministry of Natural Resources. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1976	Soils and Vegetation of the Benue Valley. Land Resources of Central Nigeria. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1975	Soils and landform of the Kaduna Plains, reconnaissance study, Central Nigeria project. Federal Ministry of Natural Resources. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1974	Phase 1, Interim report on the Landforms , Soils and Vegetation of the Jema'a Platform. Land Resources of Central Nigeria. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1974	Phase 1, Interim Report on the Landforms, Soils and Vegetation of the Bauchi Area. Land Resources of Central Nigeria. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1973	Soils and landform of the Benue Valley, reconnaissance study, Central Nigeria project. Federal Ministry of Natural Resources. Overseas Development Administration.	Wossac – www.Soil-net.com
NIGERIA	1971	Soils and landform of the Jema'a Platform, reconnaissance study, Central Nigeria project. Federal Ministry of Natural Resources. Overseas Development Administration.	Wossac – www.Soil-net.com
LUP Notes:			
SUDAN	1988	LUP Note AAH/1/88 Liming of Qoz soils, a plant pot trial.	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html

SUDAN	1988	LUP Note AAH/2/88 Nagaa soil plant pot trial.	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1988	LUP Note AAH/3/88 Nagaa tillage trial - Jumeiza 1987.	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1988	LUP Note AAH/4/88 Tillage, tree planting and grass seeding on Basement Complex soil	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1988	LUP Note AAH/5/88 Criteria for selecting sites for new wateryards within the WSDC areas.	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1988	LUP Note AAH/6/88 Detailed soil survey of the Dimsu Development Centre farm.	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1987	LUP Note AAH/1/87 Crop yield versus soil pH at Dimsu DC.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1987	LUP Note AAH/2/87 Analysis of all available laboratory data for Basement Complex soils.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1987	LUP Note AAH/2/87 Rehabilitation of Basement Complex soils based on interpretation of available data.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1987	LUP Note AAH/5/87 Calcium deficiency in Qoz soils.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1987	LUP Note AHH/10/87 Basement tillage trial: Hashaba 1987.	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1887	LUP Note AHH/11/87 LUP Filing system WSDC	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1987	LUP Note AHH/12/87 Areas (Extent) of Land Systems in WSP 2 Area	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1987	LUP Note AAH/14/87 Land systems and land use in the NWA Pilot Scheme area.	
SUDAN	1987	LUP Note AHH/13/87 LANDSAT 5 Hardcopy for WSP 2 Area	WSDC, Nyala, West Darfur, Sudan or www.austinhutcheon.com/lup_notes.html
SUDAN	1986	LUP Note AAH/1/86 Analysis of 1985 laboratory data for Qoz soils.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1986	LUP Note AAH/5/86 Aluminium saturation and liming - study, analysis and interpretation of available data.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1986	LUP Note AAH/86 Analysis of all available laboratory data for QOZ soils.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1986	LUP Note AAH/7/86 Analysis of all available laboratory data for Nagaa soils.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1986	LUP Note AAH/8/86 Available moisture capacities (AWC), an analysis of available data.	WSDC, Nyala, West Darfur, Sudan
SUDAN	1986	LUP Note AAH/13/86 Alkalinity of Nagaa soils and possible rehabilitation and amelioration.	WSDC, Nyala, West Darfur, Sudan