

PROOF OF SERVICE IN TSUNAMI EFFECTED AREA

**Name of Applicant** Alexander Austin Hutcheon

**Tsunami Area Worked in** Banda Aceh and surrounding areas including the Kabupatens of: Aceh Besar, Pidie and Bireuen

**Duration of Service (2005)** 10 October – 23 Dec 2005  
Further input commenced February 2006

**Nature of Work** Between October and December Austin undertook an assessment of the soils in the tsunami damaged area in Banda Aceh and along the north coast of Sumatera from Banda Aceh as far as Bireuen and Pidie Kabupatens. The main task was to assess the salinity damage sustained by the soils, design or suggest methods of reclamation in order to allow them to be brought back into agricultural production.

The work involved analyzing all available soil salinity data that could be accessed from the various disjointed studies that had previously been done. Following the desk study and data manipulation Austin then visited the accessible sites, which had existing data, to collect up-to-date information on salinity and determine if other factors were playing a part in the widespread failure of crops in the effected areas even one year after the tsunami. The main cause of the on-going soil problems were established as low grade salinisation and virtual total failure of the soil drainage system.

By the end of December several "scenarios" had been described giving the causes for the on-going soil problems plus remedial interventions that required to be undertaken. The scenarios were then translated into Bahasa Indonesia by counterpart staff to make them understandable to local government, field staff and farmers plus for use in training.

The plan for 2006 is to continue the soil studies along the west coast of Sumatera where the damage is known to have been further exacerbated by massive topographical changes do to major earthquake damage.

**This statement compiled by**

Name and Qualifications:

Dr. T. Mahmud  
Deputy Team Leader

Signature:

Date:

9/2/06

Relationship with applicant (Employer, Project Manager, Counterpart etc)



Received 2 May 2006



*With the Compliments of the  
New Zealand Defence Force*

Naushad Idris  
Assistant Staff Officer Medals  
Special Services Medal Awarded to

**Alexander Austin Hutcheon for**

**Soil Reclamation Work on Salinised Soils in Banda Aceh  
following the tsunami of Boxing Day 2004**

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