## The DASS42 Plus

Dr Regan Potangaroa, Unitec Email: rpotangaroa@unitec.ac.nz

Aditi Ghosh Email: agosh@care.org.id

#### Abstract

Earlier work had established the usefulness of the DASS42 quality of life tool in humanitarian housing projects (Potangaroa, 2006). And in this paper, the application of the DASS42 tool from the perspective of a program manager (shelter) is considered. Such managers have the difficult task of coordinating field teams, reviewing their area reports, measuring progress against pre-set indicators and then deciding (based on both tangible and intangible inputs) what the next step should be. If that was not hard enough they are then required to justify their decisions to their immediate superiors and ultimately to the national agency for which they work.

In response, program mangers have tended to stay with accepted, essentially quantitative indicators with extensive use of narrative (where programs were intended to have a significant social component) to support and verify the positive nature of the qualitative issues involved. But such an approach becomes problematic when dealing with differences of geography, culture, program and the added dimension of extra communities. Moreover, interpreting such variable quantitative data to ascertain whether people are "better off" is usually unworkable and as a consequence there is the impression that the program reflects whatever the agency wants and is prone to imitation or potential hijack.

This paper outlines the use of the DASS42 in such situations as an interpretive tool when coupled together with this quantitatively based data. Instead of interpreting the quantitative data directly to ascertain whether people are "better off" but instead taking that from the DASS42 tool and then interrogating the quantitative data provides a new perspective. This represents a significant step forward for program managers, for agencies and for donors. But more importantly it results in better focused programs for beneficiaries that are in essence transparent and accountable.

The paper demonstrates this as part of the setting up of baseline study for housing provided for tsunami affected people in the Andaman Nicobar Islands (ANI) in India. The inclusion of qualitative measurements coupled to quantitative ones is not only desirable but essential for effective programs. *Keywords: DASS42, outcomes, qualitative, survey* 

## The need to measure outcomes

The need to measure outcomes rather then outputs is becoming increasing understood by the humanitarian aid community. Robert Glasser General Secretary of CARE International one of the largest International Non Government Organisation (INGO) underlines this with his comments "Over the last decade or so, there has been a major shift in the focus of NGO evaluations. Rather than simply looking at project inputs and outputs, the emphasis has turned towards measuring the overall impact of an operation. The basic idea is to find out if the lives of the people on the receiving end were changed for the better in any sustained way. More and more donors are also insisting that NGOs provide measurable proof that they make a difference..." (Glasser, 2008). He goes on to state "...While this sounds fine in theory, in practice there are drawbacks. By demanding quantifiable results, donors may force programme managers to choose easily achieved targets in preference to actions which - though less measurable - accord with sound humanitarian principles. Or reporting of aid programmes may be skewed to keep donor funds flowing. The greatest danger is that humanitarian relief will be tailored to meet the demands of donors, rather than being dictated by the type of aid that is needed on the ground..."

INGO's in response to such a situation have previous set up various excellent initiatives that included the following:

- The SPHERE Project: that set the minimum standards for disaster response aid
- The Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP) to provide for the inter change of ideas but also to ascertain best practice and lessons learnt.
- Humanitarian Accountability Project (or Partnership-International of 18 NGOs as full members) with the objective being to report back to beneficiaries whom they have been working with and who have received humanitarian aid.

UN Agencies also recognize this need to measure outcomes rather then outputs and a recent UN development Program report "Learning from Disaster Recovery: Guidance for Decision Makers" concluded that "...the foundation for any serious commitment to disaster recovery rests first of all on the principle that successful disaster recovery can only be defined in terms that are able to provide improved, more resilient, and less vulnerable conditions of future disaster risks for people, their livelihoods, and a community's collective assets and infrastructure.." (Davis, 2005). The outcomes being namely an improvement on previous conditions, resiliency and less vulnerability.

Outcomes also carry with them a sense of the qualitative (as opposed to quantitative) and intangible (as opposed to the tangible) and perhaps as suggested by Slim realism as opposed to the idealism (Slim, 2005). And this is perhaps where much, if not most, of the difficulty lies. With that in mind, the World Health Organisation's (WHO) Quality of Life Tool and the DASS42 were set up to measure the outcomes of a permanent shelter (or housing) program in Aceh in the months immediately after the 2004 Asian Tsunami in Aceh, Indonesia (Potangaroa, 2006). And since then was used in Tamil Nadu and Andaman Nicobar Islands in India, Sri Lanka, Pakistan and in various other parts of Aceh, Indonesia.

## What does the DASS42 Measure?

The DASS42 measures Quality of Life (QoL) and is administered as a 42 question survey. It was developed at the University of New South Wales, in Sydney Australia (Lovibond, 1995). It is a "set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress" and was "constructed not merely as another set of scales to measure conventionally defined emotional states, but to further the process of defining, understanding, and measuring the ubiquitous and clinically significant emotional states usually described as depression, anxiety and stress" (DASS, 2006). Thus, it is meant for the common condition of people rather then any acute clinical condition. The characteristics of high scorers on each DASS scale are as follows:

- Depression scale: self-disparaging, dispirited, gloomy, blue, convinced that life has no meaning or value, pessimistic about the future, unable to experience enjoyment or satisfaction, unable to become interested or involved, slow, lacking in initiative.
- Anxiety scale: apprehensive, panicky, trembly, shaky, aware of dryness of the mouth, breathing difficulties, pounding of the heart, sweatiness of the palms, worried about performance and possible loss of control.
- Stress scale: over-aroused, tense, unable to relax, touchy, easily upset, irritable, easily startled, nervy, jumpy, fidgety, intolerant of interruption or delay.

In addition, a Severity Index Table that characterises the scores from the survey has been developed and this greatly enhances the comparative value of the DASS42. This is shown in table 1 below

	Depression	Anxiety	Stress
Normal	0 - 9	0 - 7	0 – 14
Mild	10 – 13	8 – 9	15 – 18
Moderate	14 – 20	10 – 14	19 – 25
Severe	21 – 27	15 – 19	26 – 33
Extremely Severe	28+	20+	34 +

#### Table 1: The DASS42 Severity Index Table (Devilly, 2005).

# The Role of Quality of Life (QoL) Surveys

QoL is difficult to completely define and perhaps not surprisingly there are now many indicators or composite measures of well being. Sharpe reports lists 38 such QoL instruments (Sharpe et al, 2005) but perhaps the most critical concept is that they provide "an approximate measure of the right things is more meaningful than an exact measure of the wrong things" as stated by Malcolm (2006) and supported by others (Hallam, 1998). Polletti perhaps puts it best with the comment that such approaches " ...aims for better (as opposed to perfect) information with which to make a case for plausible (as opposed to proven) associations" (Polletti, 2004).Thus, the use of the DASS42 was not necessarily to show absolute quantitative differences (but that was possible) but rather to select the "least happy" of those in the beneficiary population. And that knowing that will make a substantial difference in understanding the issues facing beneficiaries and then be able to (rationally) develop programs that arguably target real issues at a stage in the program where such results can be used to effect such a program. At the moment the discussion on outcomes being after the fact (as opposed to real time) means that they can only at best be implemented in the next (potentially different) aid situation.

# **Routine Data Collection by INGO's**

INGO's, NGO's and UN Agencies are routinely collecting extensive amounts of data to develop their indicators and thus measure and be able to demonstrate to donors that their programs are achieving the agreed goals. Glasser reports that these are now established full time monitoring and evaluation positions within most large NGO's but whilst"...more and more donors are also insisting that NGOs provide measurable proof that they make a difference. While this sounds fine in theory, in practice there are drawbacks. By demanding quantifiable results, donors may force programme managers to choose easily achieved targets in preference to actions which - though less measurable - accord with sound humanitarian principles. Or reporting of aid programmes may be skewed to keep donor funds flowing. The greatest danger is that humanitarian relief will be tailored to meet the demands of donors, rather than being dictated by the type of aid that is needed on the ground..." (Glasser, 2008). Thus, Glasser appears to see a need for better metrics against a sounder humanitarian framework that reflects what is on the ground.

Thus to recap so far, the present situation is that aid agencies are collecting large amounts of data associated with the programmes they implement; they are then trying to confirm from this data that their programs of intervention are producing positive results and that this process is prone to skewing. And

# The Application of the DASS42 in the Andaman Nicobar Islands (ANI).

The DASS42 survey was administered to potential shelter beneficiaries (numbers shown in brackets) at the following locations in and around Port Blair, the provincial capital of ANI:

- Bamboo Flat Intermediate shelter (59)
- Brijganj Intermediate shelter (310)
- Burmanallah (38)
- Chidiyatapu (31)
- Chouldari (50)
- Dairy Farm(108)

These people were all affected by the 2004 Asian Tsunami with ANI being the next point of land fall for the tsunami wave after Aceh, Indonesia. Most were

living in transit type housing set up by the Government of India and their locations are shown below in figure 1 (the shaded areas being low lying land that was affected by the tsunami). All of the locations are within 1½hours drive from Port Blair which is shown circled on figure 1.



Figure 1: A Map of the Areas

In all this represented 300 females and 296 males and the results of the DASS42 are bar graphed (based on gender) in figure 2 below (which is shown in percentages of the above absolute numbers). From this it appears that there are no major gender inequalities with similar profiles across the three DASS42 scales. But the levels of anxiety are disproportionately higher with 21% of males and 23% of females experiencing "extremely severe" levels which is investigated further, later in the paper.



Figure 2: DAS42 Gender Analysis by Percentage

<sup>\*</sup>from the ANI web page dated Feb 12 2007. <u>http://www.and.nic.in/</u>

Location also appeared to be a factor in these disproportionate levels in both Brijganj (26%) and Dairy Farm (21%) areas as shown in the Anxiety plot in figure 3 below. But the more critical factor appeared to be age with nearly twice (at 32%) as many people over 50 years of age experiencing extremely severe anxiety compared to 18% of those under 35 years of age.

Having found that from the DASS42 survey the technique suggested within this paper is to then interrogate the family profiles of those in these two areas with a family member over 50 years

When this was done the following pattern appeared:

- Health issues; blood pressure and sugar intake were mentioned.
- Low to minimal self esteem expressed as the family not caring for them, an inability on their part to contribute to the family's restoration and their perceived drain on my resources the family did have.
- Alcoholism (related to the son and family bread winner) and the deep impact that was having on those over 50 years of age who presumably were unable to cope.
- Economic expressed as low or no income and the inability of the family involved to restore the house asset they had previously.

Such emotions resound deeply and clearly the challenge is then the setting up of an appropriate program, an area that Robert Glasser noted earlier as being "...the greatest danger is that humanitarian relief will be tailored to meet the demands of donors, rather than being dictated by the type of aid that is needed on the ground..."

## Conclusions

The use, albeit straightforward, of QoL surveys into humanitarian aid programs shows promise in moving towards a better measure of outcomes rather then out puts of humanitarian interventions. However, the sense of the present situation is that any "push" of such techniques must be matched by a complementary market "pull" by donors and management within aid agencies. Nonetheless, such approaches will not replace the need for experience and the sensitivity that it can bring.



### Figure 3: The Three DASS42 Scales by Location.







## Figure 4: The Three DASS42 Scales by Age.





## References

**Davis I (2005)** Learning from Disaster Recovery: Guidance for Decision Makers. A Publication from the International Recovery Platform (IRP) Supported by the Asian Disaster Reduction Center (ADRC), International Strategy for Disaster Reduction (ISDR) secretariat and United Nations Development Programme (UNDP) International Strategy for Disaster Reduction. Preliminary version for consultation May 2007 International Recovery Platform Compiled by Ian Davis, Visiting Professor, Cranfield, Coventry and Oxford Brookes Universities pp39

**Devilly G (2005)** Depression Anxiety Stress Scale 42 (DASS 42) Lovibond & Lovibond (1995). Viewed 26 April 2006 http://www.swin.edu.au/victims/resources/assessment/affect/dass42.html

**Glasser R (2008)** Section 3 The Developing World: Why we need to look hard at the NGOs' flaws Spring 2008 Europe's World pp151-155

Hallam A (1998) Evaluating Humanitarian Assistance Programmes in Complex Emergencies. RELIEF AND REHABILITATION NETWORK September 1998 pp 13 of pp128

**Malcolm M-J (2006)** Ripples in the pond: assessing the impact of a growing Not for Profit management programme in NZ and the Pacific. Unitec NZ Graduate Diploma in Not for Profit Management 2006 conference.

**Polletti T (2004)** Inter-Agency Health Evaluations in Humanitarian Crises. A Background Issues Paper. London School of Hygiene and Tropical Medicine March 2004 pp41 of 57.

**Potangaroa R (2006),** Measuring the Qualitative Aspects of a Reconstruction Programme: Aceh, Indonesia; Third International Conference: Post-disaster reconstruction: Meeting stakeholder Interests; Organised by the International Group for Research and Information on Post-Disaster Reconstruction (I-Rec) and the Civil Protection and Risk Management Research Centre (CESPRO) at the University of Florence; held at the Scuola di Santa Militare, Florence, Italy 17-19 May 2006

**Sharpe A, Smith J (2005)**. Measuring the Impact of Research on Well-being: A Survey of Indicators of Well-being. Centre for the Study of Living Standards CSLS Research Report Number 2005-02 February, 2005 pp 119

**Slim H (2005)** Idealism and Realism in Humanitarian Action Centre for Humanitarian Dialogue, Geneva Given at the ACFID Humanitarian Forum Canberra, 5 October 2005