# Outcomes of integrating livelihood into mental health and psychosocial support program among survivors of torture: A mixed-method study from western Nepal

Diwakar Khanal<sup>1</sup>, Sabina Sitaula<sup>1</sup>, Pitambar Koirala<sup>1</sup>, Kamal Gautam<sup>1,2</sup> & Suraj Koirala<sup>1</sup>

- 1 Transcultural Psychosocial Organization Nepal (TPO Nepal).
- 2 Center for Global Mental Health Equity, Department of Psychiatry and Behavioural Health, George Washington University, Washington, D.C, USA.
  Correspondence to: diwakarkhanal27@gmail.com

## Key points of interest

- Livelihood support is one of the major contributors for improving mental health and psychosocial well-being.
- Livelihood support helps to improve social relations and trust in the community. Improved economic capabilities and functioning via livelihood support enhances self-confidence and generates feelings of purpose and resilience among survivors of torture.

#### Abstract

Introduction: From 1996 to 2006, Nepal experienced a decade-long armed conflict that adversely impacted survivors of torture. The conflict posed threats to various facets of their lives, such as mental health, socio-economic status, human rights, and the process of reintegration into their original communities. This study was done with the survivors of torture from the armed conflict. Objective: This study aims to generate evidence on the impact of livelihood support (supporting individuals with earning their livelihood through business development, farming/animal husbandry and micro-entrepreneurship) upon mental health and psychosocial wellbeing as well as social empowerment of survivors of torture. Results: In total, 44 out of 46 torture survivors reported improvement in their mental health and psychosocial well-being after the livelihood intervention was instituted. Significant reduction in the severity of symptoms of depression (21.7% to 2.3%; P<0.001), anxiety (15.2% to 6.8%; P<0.001), and post-traumatic stress disorder (44.4% to 4.5%; P<0.01) was observed with medium to high effect size. Similarly, improvement in social relationship, economic status, and autonomy (increase in self-confidence and motivation) were noticed post-intervention. Discussion and conclusion: Our study concludes that the livelihood intervention has significantly contributed to economic uplift, improved mental health, psychosocial well-being, social empowerment and quality of life among the survivors of torture. The data provide preliminary evidence of positive outcomes from integrating a livelihood program into an MHPSS (Mental Health and Psychosocial Support) program. Although the lack of a control group prevents us from isolating the specific impacts of the livelihood program, our qualitative data indicate that the intervention is well-received, culturally relevant, and promising. The study has yielded certain recommendations for further research.

*Keywords:* Conflict, survivors of torture, livelihood, mental health and psychosocial support (MHPSS) and social relations.

#### Introduction

Nepal is a lower-middle income country situated in South Asia between India and China and has an area of 147,181 square kilometers and a population of approximately 30 million. Nepal emerged from a decade-long Maoist conflict between 1996 to 2006 claiming the lives of more than 16,000, while many more were subjected to torture, intimidation, extortion, and abduction. Nepal had the highest number of forced "disappearances" in the world in 2003 (Singh et al., 2005). The armed conflict between the Communist Party of Nepal (Maoists) and the Government of Nepal ended with a comprehensive peace agreement in 2006. The armed conflict led to social disruption, loss of lives and property, economic loss and had a significant impact on the livelihood and mental health of Nepalese population.

War has a catastrophic effect on the health and well-being of nations. War destroys communities and families and often disrupts the social and economic development of nations. The effects of war include long-term physical and psychological harm to children and adults, as well as reduction in material and human capital. (Murthy et al., 2006)

Available evidence shows that survivors of torture are highly vulnerable to developing mental health conditions and psychological distress such as depression, anxiety, post-traumatic stress disorder, palpitations, panic attacks, physical & chronic pain and suicidal ideation (Shrestha et al., 1998; Steel et al., 2009; Hassan et al., 2016). Besides the direct effects of emotional and physical trauma, torture survivors often report substantial financial and social problems (Weiss et al., 2016). Meanwhile, the interventions that focus on healing the effects of war have been shown to have limited impact as long as people continue to face daily stressors related to poverty, job insecurity, and housing, among others (Kienzler & Sapkota, 2020).

The World Health Organization (WHO) highlighted the importance of dealing with psychological trauma in World Health Assembly in 2005 and urged member states "to strengthen action to protect children from and in armed conflict" and the resolution of the WHO Executive Board in January 2005 urged "support for implementation of programmes to repair the psychological damage of war, conflict and natural disasters" (WHO 2005).

There is a dearth of evidence on the impact of livelihood interventions upon survivors of torture. There are different support programs for survivors of torture such as livelihood support or other necessary support program for survivors depending upon their local context and need (Liebling et al., 2020). An example from Uganda in which the government made provision for engaging refugees in socio-economic activities by providing 'livelihoods training including forestry' can be considered (Liebling et al., 2020).

Available evidence demonstrates that a context-specific intervention that adheres to the principle of holistic support, emphasizing overall well-being, social relations, and other determinants of mental health and human rights is required for torture survivors (Kienzler & Sapkota, 2020). The evidence on the effects of integrating livelihood into MHPSS programs for survivors of torture following the armed conflict is scanty. So, our study aimed to generate evidence on the impact of combined livelihood and MHPSS intervention on mental health and psychosocial wellbeing as well as social empowerment of survivors of torture. Our research question was: *Does livelihood intervention integrated with MHPSS program contribute to improving the mental health and wellbeing, social empowerment and economic upliftment and overall quality of life of survivors of torture?* 

## Methodology

This assessment was conducted as a part of the livelihood project being implemented by Transcultural Psychosocial Organization Nepal (TPO Nepal)) under the support of the International Rehabilitation Council for Torture Victims (IRCT) between 2021-2023. The survivors of torture in this study had been receiving individual psychosocial counselling support, group intervention support and medical treatment support. Therefore, the study aimed to explore how integrating livelihood support affects the mental health and well-being of torture survivors.

The livelihood project integration had comprehensive steps and approaches taken by doctors, psychiatrists, psychosocial counsellors and researchers:

 Step 1: Identification and assessment of torture survivors in need of livelihood support

Researchers and community-based psychosocial counsellors conducted one-on-one interviews to collect and review the current economic and social status of survivors of torture.

# 2. Step 2: Income generating activities (IGA) workshop

A 2-day workshop was conducted with survivors of torture to brainstorm on business plans for income generation. During the workshop, the survivors actively participated as co-creators of their business plans, bringing forth their own concepts for potential enterprises. This collaborative process facilitated informed decision-making regarding their engagement in the livelihood program.

# 3. Step 3: Business development plan workshop

Following the initial workshop, a subsequent business development plan workshop was conducted to further develop the survivors' business ideas. The primary activity of this phase was the creation of individual business plans, facilitated by expert consultation. TPO Nepal recruited a consultant to lead a 3-day workshop, during which each participant worked closely with the consultant to refine and formalize their business concepts. This hands-on approach ensured that each survivor of torture developed a viable and tailored business plan, laying a strong foundation for their future livelihood endeavors.

## 4. Step 4: Skill development training

Building on the foundation of individualized business plans, the next step involved comprehensive skill development training aimed at expanding the survivors' business competencies and ensuring the sustainability of their livelihood activities. This phase involved mobilizing consultant who delivered targeted training sessions. These sessions were designed to equip the participants with essential business skills, such as financial management, marketing strategies, and operational efficiency. By enhancing their capabilities through these trainings, the survivors were better prepared to implement and sustain their business ventures, thereby promoting long-term economic stability and resilience.

# 5. Step 5: Providing essential items

Following the skill development training, the project proceeded to provide essential items necessary for the initiation of the livelihood programs. This activity involved offering in-kind support tailored to each survivor's business development plan. The support included essential items such as inventory for grocery and cafe or maintenance costs for operational facilities like sheds. Additionally, to ensure the continued motivation and well-being of the participants, a full-time psychosocial counselor was deployed to provide regular follow-up and psychosocial counseling. This continuous support aimed to address any emerging challenges and foster a supportive environment, enhancing the likelihood of success and sustainability of the livelihood activities.

#### Setting

The study was conducted in Dang, Banke and Bardiya districts of Lumbini Province and Kailali and Kanchanpur districts of Sudurpaschim Province of Nepal. While Banke, Bardiya and Kailali predominantly harbour people from the marginalized communities (*Tharus*), Dang and Kanchanpur constitute of mixed communites including Brahmin, Chhetri and Janajati. These districts were selected as they were the most affected by the armed conflict. Bardiya recorded the highest number of survivors of torture in the country. Agriculture is the mainstay of livelihood in this region.

## Design

The study utilized a mixed-methods approach. The quantitative assessment involved baseline and end line surveys using a structured questionnaire while the qualitative assessment involved interviews with survivors of torture.

# Population and sample recruitment

The participants for the quantitative assessment were adult male and female survivors of torture from the armed conflict in the five aforementioned districts. Torture was inflicted among the survivors from both the state and rebelling parties. Sample recruitment was done purposively by using the following inclusion criteria:

- age over 18 years,
- history of directly being affected by the conflict,
- residence in the aforementioned districts and
- willing to participate in our study.

A total of 46 survivors of torture (43 female and 3 male) from Lumbini and Sudurpaschchim Provinces of Nepal were enrolled. Two of the participants from the baseline dropped out at the endline following their labour migration to India. The baseline and endline surveys and interviews were conducted face-to-face. An informed consent was taken from all respondents before the survey and interview. The survey and interviews were conducted in Nepali language.

All the survivors of torture who participated in the survey and interview had been receiving mental health and psychosocial support in the form of either individual psychosocial counselling or psychiatric consultation or group intervention.

## Instruments

We used the following tools for measurement of mental health in the surveys: Beck's Depression Inventory (BDI), Beck's Anxiety Inventory (BAI), and Post-traumatic Stress Disorder (PTSD) Checklist-Civilian Version (PCL-C). All of these tools have been validated in Nepal.

BDI and BAI both constitute of 21 items and are used to assess depression and anxiety symptoms over the prior 2 weeks. Items are scored over a likert scale ranging from 0−3. The total score ranges from 0 to 62. Scales were validated for use in Nepal (Kohrt et al., 2002; Kohrt et al., 2003) with clinical DSM-IV diagnoses of major depressive disorder or generalized anxiety disorder: area under the curve (AUC) 0.92 (95% CI 0.88-0.96) for the BDI and 0.85 (95% CI 0.79-0.91) for the BAI; internal reliability (Cronbach alpha), BDI  $\alpha$  = 0.90 and BAI  $\alpha$ = 0.90. Based on the clinical validation of the BDI in Nepal, a score of 20 or higher suggests moderate depression symptoms with the need for mental health intervention (sensitivity 0.73, specificity 0.91) (Kohrt et al., 2002). 21 On the BAI, a score of 17 or higher indicates moderate anxiety symptoms with need for intervention (sensitivity 0.77, specificity 0.81) (Kohrt et al., 20023). These cut-off scores reflect symptom burden at the level requiring intervention. The cut-offs do not however indicate diagnoses of major depressive disorder or generalized anxiety disorder. Test-retest reliability Spearman-Brown coefficients for the BDI were 0.84 and for the BAI were 0.88.

Post-traumatic stress disorder (PTSD) Checklist-Civilian Version (PCL-C) is a 17-item self-report rating scale for assessing PTSD symptoms and severity within the past week (Weathers et al., 1993). The English-language measure has good psychometric properties in Western populations (Weathers et al., 1993). This tool has been validated in Nepal (Thapa, SB and Hauf, E., 2005) and has sound psychometric properties. The validated Nepali version performs similarly (Tol et al., 2007) with a cut-off score of 50 or above indicating need for intervention. Internal reliability was 0.83 and test–retest reliability was 0.82.

The surveys took between 45-60 minutes each. The qualitative interviews were conducted using a structured Key Informant Interview (KII) Guide. The interviews with survivors lasted between 30-40 minutes.

Social and economic impacts of the intervention were assessed using the locally developed qualitative and quantitative questionnaires. The qualitative questionnaires included open-ended questions aimed at understanding the survivors' feelings regarding several key areas:

- Economic and social relationships: This category explored the level of trust and quality of interactions (e.g., talking nicely) with other people.
- Self-confidence: This focused on the survivors' feelings of self-efficacy, such as their belief in their ability to accomplish tasks (e.g., feeling "I can do something").
- Economic trust: This examined the trust other people had in the survivors, including their willingness to extend loans.
- Everyday expenditure: This covered the survivors' ability to manage daily expenses, such as purchasing food, medicine, medical check-ups, and financing children's education.
- Inclusion in cultural and religious activities: This assessed the extent to which survivors were included in such activities by their family and community.
- Discrimination by family and community: This included discrimination due to being a survivor, as well as discrimination based on gender, caste, or other factors.
- Support by family and community: This investigated the level of support provided by family and community members.
- Trust by family and community: This measured the trust placed in the survivors by their family and community.
- Social network: This explored the survivors' social connections and support systems.

Table 1. Testimonies of torture survivors regarding their mental health and psychosocial wellbeing

Age, Gender, Torture, Year	Testimony
41, female, physical, mental, sexual and gender-based violence, 2002	"On 31 August, 2002, state force knocked on my door at 12 am midnight asking for my son who was convicted of being an alleged Maoist. My father-in-law was severely beaten. They grabbed and pulled my hair, took me to another room and raped me. They stepped and hit me with the boot and barrel of the gun. This severely affected me mentally".
42, female, physical, mental, sexual and gender-based violence, 2001	"I was taken under custody allegedly working for the Maoists. I was physically and mentally assaulted for 3 days. I was shifted to another prison for 1 year and 3 months. During those time they put blinds around my eyes and tortured me".
39, female, physical and mental	"My sister-in-law was shot dead in our house in my presence. I was physically assaulted, with fractured hands and one of my ear drums have ruptured".

# Data collection and analysis

Data collection for baseline was done between 13th to 18th July, 2022 and the endline between 5th to 9th December, 2022. Baseline data was collected in July 2022 and endline was conducted in December 2022. The quantitative data was analyzed using SPSS whereas the qualitative data was analysed using a thematic approach. A paired-sample t-test was conducted to assess the impact of integrating a livelihood program with mental health and psychosocial support on survivors of torture, focusing on three key issues: anxiety, depression, and PTSD. Cohen's d was calculated for each variable to report the effect size (Cohen, 1988). Qualitative analysis involved detailed coding of the responses, which allowed us to systematically identify, organize, and understand patterns and themes within the data. This thematic approach of thorough review of interview transcripts followed with initial coding, searching for themes and reviewing them allowed the study to capture the nuanced and multifaceted nature of the social and economic impacts experienced by the participants, providing a rich and in-depth understanding of their experiences.

#### Results

Overall the integrated livelihood and MHPSS support demonstrated improvements in mental health outcomes, social relationships and empowerment, economic capabilities and resilience. The results have been illustrated subsequently.

## Methods of torture among survivors

Table 1 quotes serve as examples of the forms of ill-treatment endured by the survivors.

#### MHPSS outcomes

Overall, mental health and psychosocial wellbeing of all the survivors of torture had improved at the endline. The survivors mentioned that receiving the group intervention and counselling had been a great help and supported them in managing the stress. They stated that the emotional support helped in boosting their self-confidence and also guided them in applying suitable coping mechanisms during periods of stress. Most of the respondents mentioned that the reason behind their mental health condition having improved as compared to before was receiving livelihood support and MHPSS services together. This was in-

Table 2. Prevalence of psychosocial and mental health problems (anxiety, depression and/or PTSD)

Category	Base line (N)	%	End line (N)	%	P value (paired t- test)
Anxiety					
No	39	84.8	41	93.2	<0.001
Anxiety (≥ 17.5)	7	15.2	3	6.8	
Total	46	100.0	44	100.0	
Depression					
No	36	78.3	43	97.7	<0.001
Depression (score ≥ 24.5)	10	21.7	1	2.3	
Total	46	100.0	44	100.0	
PTSD					
No	25	55.6	42	45.5	<0.01
PTSD (score $\geq 50$ )	20	44.4	2	4.5	
Total	45	100.0	44	100.0	
Co-morbidity status					
None	9	20.0	40	90.9	<0.001
Any one	20	44.4	3	6.8	
Any two	9	20.0	0	-	
All three	7	15.6	1	2.3	
Total	45	100.0	44	100.0	

ferred from the interviews with them. These findings have been supported by qualitative interviews.

Nowadays, I do not think about negative things and don't have negative thoughts. Before, thoughts used to come frequently regarding what would happen in future, and I used to get worried. However, after talking to the counsellor, my condition has improved. Now I feel the energy in my body. Whenever I have stress, I think that I am not alone and there are others like me which gives me hope, and I feel ok. (55 years, F, Bardiya)

Outcomes on mental health and psychosocial status were measured using the validated tools-BDI, BAI and PCL-C. The prevalence of anxiety had significantly decreased from 15.2% to 6.8% at the endline (P<0.001) with medium effects size based on Cohen's convention. Similarly, around 21.7% of respondents had depression at the baseline which significantly dropped to 2.3% at the endline (p<0.001) with high effect size. Approx. 44.4% had post-traumatic stress disorder which significantly reduced to 4.5% after the intervention with medium effect size. Meanwhile, 44.4 % met the cut-off for at least one of these mental health conditions (either anxiety or depression or PTSD) at the baseline which reduced to 6.8% after the intervention. Likewise, 15.6% had met the cut-off score for comorbidity of all three conditions at the baseline which dropped to 2% at the endline. While 20% had two comorbid conditions at the baseline, none was identified with two comorbid conditions at the end line. The improvement of comorbidity status during this period was also statistically significant (p<0.001).

All the respondents emphasized that the psychosocial counselling and training programs helped them in effectively managing their stress, anxiety, and depression. Overall, the mental health condition of all the service users had improved. All the individuals mentioned that receiving the group intervention and counselling had been of great help and support in managing their levels of stress. They felt that the counsellors provided them with emotional support, which had helped them boost up their self-confidence.

The end-line assessment identified that self-confidence had increased among all respondents after receiving the IGA/ livelihood support along with MHPSS. This had positively impacted the mental health and wellbeing of survivors. They said they felt they could also do something to sustain their living since they no more had any stress and uncertainty of future after receiving livelihood support. A 46-year-old female from Banke stated,

My self-confidence has increased a lot. I also got the tent for keeping the goat as I wanted. Now I feel that I can manage and sustain my life with this goat.

Many other females responded similarly, saying that the IGA and mental health support has contributed a lot to increasing their self-confidence. A 39-year-old male from Banke stated, "The psychosocial support and group healing intervention has increased my self-confidence and helped me and my family mentally".

Some expressed how their strong confidence after the livelihood support and good social relationships improved their mental health. They felt that people in the community were treating them better which made them feel more confident and emotionally resilient. A female from Banke, age 39, mentioned that the support of goat farming had kept her very busy, which helped her ward off any other stressor(s).

Social and economic empowerment

#### Qualitative data

Socio-economic empowerment was measured both qualitatively and quantitatively. The majority of the respondents found their socio-economic condition to be better. They said that their social relationships in the community had become stronger, and their neighbours started helping them with their daily chores, trusting them and providing loans. They highlighted that enrolling in the counselling and livelihood support program changed the perspectives of their neighbours, who used to discriminate and exclude them before.

This discrimination manifested before in several ways including a lack of trust on survivors, exclusion from social and community events, and denial to provide informal loans (a common practice in Nepalese culture where neighbors lend money without documentation).

Prior to receiving livelihood support, many survivors faced significant challenges in managing their daily expenses. The provision of targeted livelihood support has markedly improved their financial situation enabling them to cover basic needs more effectively. For some, this support had resulted in substantial financial empowerment thereby allowing them to earn more than they previously could. Additionally, access to microloans has been facilitated, fostering trust within their communities. This economic resilience and empowerment has also contributed to their psychological well-being and alleviating stress. The integration of livelihood support has thus had a profound impact on the everyday lives of survivors of torture, promoting both economic stability and psychosocial well-being.

Several participants expressed that they had experienced discrimination but after the livelihood intervention they informed that the discrimination had decreased. Economic empowerment led to reduction of discrimination and increased trust. A significant factor contributing to the decrease in discrimination is the support provided to torture survivors by the organization. The community observed that these survivors received assistance from NGOs. The association of torture survivors with the organization and support network appears to have shifted community members' perspectives toward the survivors. One female from Kailali, age 41, said,

It is better than before. Before, the community people did not trust me and used to discriminate against me, but now is not the case.

Others highlighted how they had received a loan from the group and short-term petty cash loans from neighbours due to the good social relationships they had developed in the community following the intervention.

The community members viewed their social status as more trustworthy due to their affiliation with an organization. One of the respondents from Banke mentioned that her family and neighbours now respect and trust her more because she received assistance to buy the battery for her TukTuk¹. Other respondents from Dang, Banke, Bardiya, Kailali and Kanchanpur mentioned the same thing, namely that their neighbours and community had started trusting them and inviting them to various social events such as wedding ceremonies, festivals, and other gatherings. This trust was also developed with the local cooperatives where the torture survivors were able to get some financial support as a loan for a brief period.

Likewise, the majority of the individuals reported improvement in their economic condition compared to before. Most individuals highlighted how the livelihood support had benefited them in managing their everyday livelihood, finances, household expenses and materials for children. Many of the individuals were involved in goat and pig husbandry which generated profit after sale. Most individuals had their primary source of income through agriculture, livestock (goat and pig husbandry), labour works and other businesses respectively.

The majority of the survivors of torture had taken a significant leap of faith and hope when offered assistance with their livelihoods because this gave them some form of financial sup-

port and kept them busy. The end-line assessment found that the majority of the respondents felt that they received much or some support from their family and community members. Most of the support was related to providing help with every-day chores, medical treatment support, household support and other everyday activities.

Before receiving the support, it had been difficult for them to manage their daily expenses. After receiving the livelihood support, they reported being able to manage their basic expenses. Some have earned even more and felt the financial empowerment in their life. Many survivors were able to take the loan and build the trust in the community after receiving the livelihood support. They felt economic resiliency, empowerment and being busy helped them in managing their stress. Livelihood integration had a significant impact in the everyday livelihood of survivors of torture.

Majority of the individuals linked their economic condition to support from livelihood. They said that the livelihood support had provided them with some financial independence and some sort of help in managing everyday household expenses for oil, food and basic needs (copy, pencil, bag and clothes) for their children. A female from Bardiya, age 29, mentioned

The condition is better. I sold two pigs for Rs 18,000 each. I also have 2 small baby pigs, which I bought for Rs 5000 and Rs 3500. The money that I received from selling the pigs helped me provide education for my daughter, food for my household and other small expenses. Furthermore, my husband is also doing labour work in India, and he sends Rs 10 to 15 thousand every month.

At the endline, majority of the survivors reported that it was easier for them to manage their everyday expenses especially medical expenses, stationery items for their children, running hotels, daily household expenses, educating their children, paying back their loan instalments, and buying compost. A 46-year-old female from Banke mentioned

Livelihood support has given me some reason to live. It made my life very easy. It gave me a goat, and now I feel happy. After receiving the support, livelihood and earning have been easier.

Similarly, another female from Banke mentioned

with the support, change has happened. They gave me Rs.14000 worth of Nepali Pote, and I sold it for Rs. 28000.

<sup>1</sup> A "tuk-tuk" is a three-wheeled motorized vehicle used as a taxi or mode of transportation in certain countries. It's known for its compact size, distinctive sound, and offers a convenient way to navigate urban traffic.

Few of them mentioned that their economic relationship with the people in the community has become better, and they both lend money to each other, while others mentioned that even though the people in the community have started treating them nicely, they had not been supporting them in economic matters. One female from Bardiya, aged 50, mentioned

The relationship has become better to some extent. But in terms of money, they trust me only for a day or two and don't lend me money for a long time. Since I don't have a husband, they don't trust me in financial matters.

One of the major outcomes observed in the intervention was economic empowerment. Providing torture survivors with livelihood opportunities, such as vocational training, assistance with battery replacement for their auto businesses, or other small business support, significantly contributed to their economic empowerment. Interviews with torture survivors and psychosocial counselors in the field revealed that the survivors had regained a sense of self-sufficiency and financial independence. This financial autonomy was highlighted as being crucial for their overall well-being.

Another significant improvement was observed in the survivors' psychological well-being. The sense of economic stability and the ability to support themselves and their families positively impacted their mental health. Survivors reported a reduction in feelings of helplessness and dependency, which had often been pervasive since the aftermath of their torture experiences.

Furthermore, access to livelihood opportunities had a profound impact on social reintegration and rehabilitation within the community. Many respondents noted that the support and opportunities they received helped build their credibility. Community members began to trust them more which facilitated their social reintegration. One respondent mentioned that becoming productive members of society made it easier to rebuild social connections and overcome the stigma often attached to victims of torture. This newfound trust made it easier for them to request help and loans from community members and neighbours, who previously did not trust them and often discriminated against them.

Additionally, survivors noted that their views, opinions, and conversations which were previously ignored, were now being considered. Their financial support and affiliation with a recognized non-governmental organization enhanced their credibility, leading to greater inclusion and invitations to community and social events. This shift in community perception played a crucial role in their social reintegration and overall sense of belongingness.

Table 3. Livelihood intervention impact (endline data)				
Ease to manage daily Expenses	Yes			
N(%)	40 (90.9%)			
Increased economic trust by others in the community	Yes			
N(%)	41(93.2%)			
Increase in self-confidence	Yes			
N(%)	44(100%)			
Improved economic as well as social relationships	Yes			
N(%)	41(93.2%)			

## Quantitative data

The results from the quantitative assessment show improvement in monthly earnings, spending capacities and expand business model that they opted.

#### Discussion and conclusion

This assessment took an attempt to determine the outcomes of integrating livelihood support into ongoing MHPSS program for survivors of torture. The study has several strengths. First, this study is unique in its nature in the sense that it has evaluated the multi-faceted outcomes of integrating economic intervention into ongoing MHPSS program. Second, the study has used scientific and validated measurement tools to determine the changes in mental health outcomes over time. Third, the study has used mixed methods approach to triangulate the findings from the study. Fourth, the study was done with survivors of torture and would probably be the first of its kind with those beneficiaries to estimate multi-dimensional impacts of livelihood intervention jointly delivered with MHPSS.

The findings from the study indicate that engaging survivors of torture in livelihood activities has contributed to economic uplift of the beneficiaries. This finding is consistent with the findings from various other studies conducted with victims of torture in fragile and conflict affected settings and low-middle income countries. These studies have demonstrated an improvement in income and reduction of poverty following economic/livelihood intervention (Blattman & Annan, 2011; Koyabu, 2014; World Bank, 2015).

Our study has shown improvement in psychosocial wellbeing of the beneficiaries following the livelihood intervention. Poverty has been identified as a mediator of the relationship between armed conflict and psychological wellbeing and mental health (Miller & Rasmussen, 2010). In a systemic review of

the psychological health of conflict-affected populations in lowand middle-income countries (LMICs), poor income and assets and unemployment were associated with poorer mental health and psychological wellbeing, and insecure financial conditions of unemployment contributed to poorer psychological wellbeing (Roberts & Browne, 2011). Similarly, a meta-analysis of 56 research studies on mental health amongst refugee people (including internally displaced, asylum seeking and stateless people) using a worldwide study sample demonstrated that economic opportunity had a linear relationship with improved mental health (Porter & Haslam, 2005). Integration of livelihood support into MHPSS programs demonstrated a positive impact, easing the management of daily expenses and reducing anxiety and depression among survivors, consistent with findings by Liebling et al. (2020). Consistent with these literature, livelihood interventions delivered to the victims of torture in our study have been found to have a positive impact on psychological wellbeing (El-Namrouty et al., 2013; Ziveri et al., 2019).

The paper by Lordos et al., 2021 highlights Rwanda's experiences of profound impact of violent conflict and genocide on mental health, social cohesion, and sustainable livelihoods, reflecting challenges that can be shared globally. Countries grappling with similar histories can draw valuable lessons from Rwanda's decades-long journey toward multisystemic recovery and resilience. The approach advocates for integrating local innovations with international practices, guided by scholarly reflection and evidence-based strategies.

Additionally, this study has also shown social empowerment among the beneficiaries after enrollment into the livelihood intervention. Social empowerment has been defined in a diverse manner across different settings (Kuttab, 2010). Social empowerment in our study has been conceptualized in the form of self-reliance, ability to regain social trust and harmony, establishment of social networks and connections, improved decision making capacity and enhanced capacity to voice one's opinion. Recipients of livelihood support in our study reported strengthened social relationships and economic trust within the community, emphasizing how financial stability fosters strong social and economic bonds for torture survivors.

The concept of trust, especially how affiliation with an organization enhances trust among survivors of torture, is indeed intriguing and merits further exploration in academic discussion. As observed in the context of this intervention, survivors highlighted that their association with a recognized non-governmental organization (NGO) significantly boosted their credibility within the community.

Moreover, exploring the community dynamics of these relationships is essential. The community's reception of survivors,

influenced by their association with supportive organizations, shapes their opportunities for social engagement and acceptance. Future discussions could delve deeper into how these organizational ties impact social cohesion and community acceptance, drawing parallels with similar contexts where organizational affiliations have played pivotal roles in enhancing social relations among vulnerable groups.

Earning income through livelihood support not only provided essential financial assistance but also contributed to better mental health and psychosocial well-being through strengthened relationships with family and the community. The cumulative effect enhances overall well-being, resilience, self-esteem, and self-confidence in dealing with traumatic events. This finding from our study is consistent with a study on the impact of livelihood on psychosocial wellbeing and social empowerment in an ongoing conflict setting (Hammad & Tribe, 2020).

Continued mental health and psychosocial support were identified as beneficial for survivors' societal reintegration, addressing individual trauma experiences and improving interpersonal skills and community relationships. The study highlighted the significant positive impact of livelihood interventions on socio-economic empowerment, alleviating severe poverty and unemployment among survivors. The reduction of poverty through livelihood interventions contributed to improved mental health outcomes and social empowerment, as suggested by Kienzler and Sapkota (2020). Livelihood support increased self-confidence and resilience among survivors, aligning with findings from Weiss et al. (2016) and Kienzler & Sapkota (2020).

Our data show preliminary evidence suggesting positive results from integrating a livelihoods program into an MH-PSS (Mental Health and Psychosocial Support) program. Although the lack of a control group makes it impossible to determine the specific impacts of the livelihoods program, our qualitative data indicate that the intervention is well-received, culturally relevant, and promising. Overall, our study suggests that the livelihood intervention has contributed to economic uplift, improved mental health and psychosocial well-being, and social empowerment among the beneficiaries enrolled in the intervention. The study highlights the potential of locally led livelihood interventions in alleviating the suffering of victims of torture.

The livelihood intervention should be developed using a co-creation approach, engaging the beneficiaries and considering the real needs and scope of market. This approach would help ensure the sustainability of the intervention and maintain the production-sale cycle. To support an efficient produc-

tion-sale cycle, a series of workshops were conducted in close consultation with survivors of torture and contextualized to the setting.

Social empowerment and resilience have often been defined using Western concepts, which might not always be applicable to the local context. Defining these domains with local understandings could better capture and visualize relevant outcomes of the livelihood intervention across the beneficiaries' lives. While the intervention has shown positive psychological, economic, and social outcomes, the presence of a control group for comparison could have strengthened the evaluation. Integrating livelihood intervention with mental health and psychosocial support programs is highly commendable where this study being one of a kind has also yielded certain recommendations for future improvements.

#### Limitations

There are some limitations to the study. First, the study was conducted among a small sample of survivors of torture in selected districts of Lumbini and Sudurpashchim Provinces of Nepal. So, the findings of the study may not be generalizable. However, this study has accessed a hard-to-reach community and contributed to an under-researched area in Nepal. Second, the study utilized a local semi-structured questionnaire for evaluating the economic impacts of the livelihood intervention. A more rigorous and elaborative method incorporating prior status of beneficiaries, income, source of income and whether the beneficiaries relied on our livelihood support would have been better. This would have further contributed to a broader scenario of economic impacts. Third, the improved outcomes of the study could partially be attributed to the psychosocial counselling and medical treatment support received by the survivors while receiving livelihood support as well and may not be solely due to livelihood intervention. Meanwhile, participation of the survivors in the training, affiliation with an organization and acquisition of appropriate skills could have led to improved outcomes at the endline. It is however difficult to delineate the effects of each individual component on improvement in outcomes. Fourth, a comparison between the specific intervention arms is lacking thereby limiting the understanding of impact of each intervention. Therefore, a randomized controlled trial consisting of 2 arms (MHPSS only and MHPSS + livelihood) or 3 arms (MHPSS only, MHPSS + livelihood and control arm) is recommended in future to further understand the outcomes of each specific intervention.

**Project documentary**: https://www.youtube.com/watch?v=at\_0K88yBfs

#### Financial disclosure

The study was conducted as a part of the project funded by the International Rehabilitation Council for Torture Victims (IRCT). The funding partner was not involved in research design, methodology and interpretation of results and does not have any influence on this study.

## Acknowledgments

The authors would like to thank Pau Pérez-Sales for his suggestions and sharing his views and the three anonymous referees for their useful comments and suggestions.

# References:

- Blattman, C., & Annan, J. (2011). Reintegrating and employing high risk youth in Liberia: Lessons from a randomized evaluation of a landmine action agricultural training program for ex-combatants. Evidence from randomized evaluations of peacebuilding in Liberia: Policy report. Innovations for Poverty Action.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed). Lawrence Erlbaum Associates.
- El-Namrouty, K. A., Alhabil, W., & Al-thalathini, D. A. (2013). Effect of micro-grants on poverty alleviation of Palestinian families (Gaza Strip – Palestinian territories). Journal of World Economic Research, 2(5), 82-88.
- Hammad, J., & Tribe, R. (2020). The Impact of a Livelihood Intervention on Psychosocial Wellbeing and Economic Empowerment in an Ongoing Conflict Setting: The Gaza Strip. *Intervention*, 18(2), 108-118.
- Hassan, G., Ventevogel, P., Jefee-Bahloul, H., Barkil-Oteo, A., & Kirmayer, L. J. (2016). Mental health and psychosocial wellbeing of Syrians affected by armed conflict. *Epidemiology and Psychiatric Sciences*, 25(2), 129–141. https://doi.org/10.1017/ S2045796016000044
- Jeffery, R. (2021). Truth commissions and democratic transitions: Neither truth and reconciliation nor democratization in Nepal. *Journal of Human Rights*, 20(3), 318–338. https://doi.org/10.1 080/14754835.2021.1886059
- Joshi, M., & Pyakurel, S. R. (2015). Individual-Level Data on the Victims of Nepal's Civil War, 1996–2006: A New Data Set. *International Interactions*, 41(3), 601–619. https://doi.org/10.1 080/03050629.2015.987345
- Kienzler, H., & Sapkota, R. P. (2020). The Long-Term Mental Health Consequences of Torture, Loss, and Insecurity: A Qualitative Assessment Among Survivors of Armed Conflict in the Dang District of Nepal. *Frontiers in Psychiatry*, 10. https://www.frontiersin.org/articles/10.3389/fpsyt.2019.00941
- Kohrt BA, Kunz RD, Koirala NR, Sharma VD, Nepal MK (2002) Validation of a Nepali version of the Beck Depression Inventory. *Nepalese Journal of Psychiatry 2*: 123–130.
- Kohrt, B.A., Kunz, R., Koirala, N., Campus, M., & Nepal. (2007). Validation of the Nepali version of Beck Anxiety inventory. *Journal of Institute of Medicine*, 25.
- Kohrt, B. A., Hruschka, D. J., Worthman, C. M., Kunz, R. D., Baldwin, J. L., Upadhaya, N., Acharya, N. R., Koirala, S., Thapa, S. B., Tol, W. A., Jordans, M. J. D., Robkin, N., Sharma, V. D.,

- & Nepal, M. K. (2012). Political violence and mental health in Nepal: Prospective assessment. *The British Journal of Psychiatry*, 201(4), 268–275. https://doi.org/10.1192/bjp.bp.111.096222
- Koyabu, M. I. (2014). Community-driven development and women's empowerment in the reconstruction of Afghanistan: A case study on community empowerment programme for women (CEPW) in Balkh province, Afghanistan. http://global-studies.doshisha.ac.jp/ attach/page/GLOBAL\_STUDIES-PAGE-EN-73/80552/file/vol4 6.pdf
- Kuttab, E. (2010). Empowerment as resistance: Conceptualizing Palestinian women's empowerment. *Development*, 53(2), 247-253
- Liebling, H., Barrett, H., & Artz, L. (2020). South Sudanese Refugee Survivors of Sexual and Gender-Based Violence and Torture: Health and Justice Service Responses in Northern Uganda. *International Journal of Environmental Research* and Public Health, 17(5), 1685. https://doi.org/10.3390/ ijerph17051685
- Lordos, A., Ioannou, M., Rutembesa, E., Christoforou, S., Anastasiou, E., & Björgvinsson, T. (2021). Societal Healing in Rwanda. Health and Human Rights, 23(1), 105–118.
- McColl, H., Higson-Smith, C., Gjerding, S., Omar, M. H., Rahman, B. A., Hamed, M., El Dawla, A. S., Fredericks, M., Paulsen, N., Shabalala, G., Low-Shang, C., Perez, F. V., Colin, L. S., Hernandez, A. D., Lavaire, E., Zuñiga, A. P., Calidonio, L., Martinez, C. L., Jamei, Y. A., & Awad, Z. (2010). Rehabilitation of torture survivors in five countries: Common themes and challenges. *International Journal of Mental Health Systems*, 4(1), 16. https://doi.org/10.1186/1752-4458-4-16
- Medeiros, E., Shrestha, P. N., Gaire, H., & Orr, D. M. R. (2020). Life after armed group involvement in Nepal: A clinical ethnography of psychological well-being of former "child soldiers" over time. *Transcultural Psychiatry*, *57*(1), 183–196. https://doi.org/10.1177/1363461519850338
- Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings:

  Bridging the divide between trauma-focused and psychosocial frameworks. *Social Science & Medicine* (1982), 70(1), 7–16. https://doi.org/10.1016/j.socscimed.2009.09.029
- Murthy RS, Lakshminarayana R. Mental health consequences of war: a brief review of research findings. *World Psychiatry*. 2006 Feb;5(1):25-30.
- Pedersen, D. (2002). Political violence, ethnic conflict, and contemporary wars: Broad implications for health and social well-being. *Social Science & Medicine* (1982), 55(2), 175–190. https://doi.org/10.1016/s0277-9536(01)00261-1
- Porter, M., & Haslam, N. (2005). Predisplacement and post displacement factors associated with mental health of refugees and internally displaced persons: A meta-analysis. The Journal of the American Medical Association, 294(5), 602-612.
- Roberts, B., & Browne, J. (2011). A systematic review of factors influencing the psychological health of conflict-affected populations in low- and middle-income countries. Global Public Health, 6(8), 814-829.
- Sharma, B., & van Ommeren, M. (1998). Preventing Torture and Rehabilitating Survivors in Nepal. *Transcultural Psychiatry*, 35(1), 85–97. https://doi.org/10.1177/136346159803500104

- Shrestha, N. M., Sharma, B., Van Ommeren, M., Regmi, S., Makaju, R., Komproe, I., Shrestha, G. B., & de Jong, J. T. (1998). Impact of torture on refugees displaced within the developing world: Symptomatology among Bhutanese refugees in Nepal. JAMA, 280(5), 443–448. https://doi.org/10.1001/jama.280.5.443
- Singh S, Dahal K, Mills E. Nepal's war on human rights: a summit higher than Everest. Int J Equity Health 2005, 4(9) doi:10.1186/1475-9276-4-9
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *JAMA*, 302(5), 537–549. https://doi.org/10.1001/jama.2009.1132
- Thapa, S. B., & Hauff, E. (2005). Psychological distress among displaced persons during an armed conflict in Nepal. *Social Psychiatry and Psychiatric Epidemiology*, 40(8), 672–679. https://doi.org/10.1007/s00127-005-0943-9
- Tol, W. A., Barbui, C., Galappatti, A., Silove, D., Betancourt, T. S., Souza, R., Golaz, A., & Van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: Linking practice and research. *The Lancet*, 378(9802), 1581–1591. https://doi.org/10.1016/S0140-6736(11)61094-5
- Tol, W. A., Kohrt, B. A., Jordans, M. J. D., Thapa, S. B., Pettigrew, J., Upadhaya, N., & de Jong, J. T. V. M. (2010). Political violence and mental health: A multi-disciplinary review of the literature on Nepal. *Social Science & Medicine* (1982), 70(1), 35–44. https://doi.org/10.1016/j.socscimed.2009.09.037
- Tol, W. A., Komproe, I. H., Thapa, S. B., Jordans, M. J. D., Sharma, B., & De Jong, J. T. V. M. (2007). Disability associated with psychiatric symptoms among torture survivors in rural Nepal. The Journal of Nervous and Mental Disease, 195(6), 463–469. https://doi.org/10.1097/NMD.0b013e31802f5dac
- Upreti, D. B. R. (n.d.). Armed Conflict and peace Process in Nepal. Retrieved September 30, 2022, from https://www.academia. edu/1156055/Armed Conflict and peace Process in Nepal
- Weathers FW, Litz BT, Herman DS, Huska JA, Keane TM. (1993).. The PTSD Checklist (PCL): Reliability, Validity, and Diagnostic Utility. Paper presented at: 9th Annual Meeting of International Society for Traumatic Stress Studies.
- Weiss, W. M., Ugueto, A. M., Mahmooth, Z., Murray, L. K., Hall, B. J., Nadison, M., Rasmussen, A., Lee, J. S., Vazzano, A., Bass, J., & Bolton, P. (2016). Mental health interventions and priorities for research for adult survivors of torture and systematic violence: a review of the literature. *Torture*, 26(1), 17–44
- World Health Organization (2005). Resolution on health action in crises and disasters. Geneva.
- World Bank. (2015). Implementation completion and results report on the three credits in the amount of SDR 82.5 million (USS 124.7 million equivalent), to the Democratic Socialist Republic of Sri Lanka for the community livelihoods in conflict-affected areas project. http://documents.worldbank.org/curated/en/603681468188936537/pdf/
- Ziveri, D., Kiani, S., & Broquet, M. (2019). The impact of psychosocial support on well-being and agency within an inclusive livelihood programme. *Intervention*, 17(1), 86-95. https://doi.org/10.4103/INTV.INTV\_26\_18