

ENGAGEMENT OF NATIONAL CADET CORPS (NCC) CADETS IN DISASTER RISK MITIGATION UNDER PANDEMIC COVID-19: A CASE STUDY OF TAMILNADU, PUDUCHERRY AND ANDAMAN & NICOBAR ISLANDS

Commodore Vijesh Garg & Annie Sam

Research Scholar, AMET Business School, AMET University, Kanathur, Chennai, Tamil Nadu, India

Associate Professor, AMET Business School, AMET University, Kanathur, Chennai, Tamil Nadu, India

Received: 05 Jun 2020

Accepted: 06 Jun 2020

Published: 10 Jun 2020

ABSTRACT

Disaster risk mitigation has become most important area in disaster management, especially in India. Pandemic COVID19 also comes under disaster, and has been managed accordingly under National Disaster Management Act 2005. While medical professionals were handling the patients in hospitals/labs, greater efforts and teams were required for awareness campaign for following safe practices and enforcing it. Our national disaster management policy and plan still do not have detailed guidelines for engagement of NCC cadets/youth organizations in such situations. Considering the need, government of India had engaged NCC cadets formally for the first time on newly drafted guidelines by NCC HQ. This paper through a case study, analysis and hypothesis testing clearly bring out the efficacy and adequacy of newly formed guidelines, effectiveness and impact of engagement of trained volunteer NCC cadets for risk mitigation tasks during COVID-19 as observed by the administration.

KEYWORDS: *Disaster Risk; Mitigation; Pandemic; COVID-19; NCC*

INTRODUCTION

Managing the response to a disaster in protecting the lives of its citizens, their assets and public or private infrastructure is termed as Disaster Management. As shift in approach to Disaster Management, Risk Mitigation or Reduction has become priority focus area of Government/administration in India, so as to save maximum lives and to reduce the extent of damage/destruction. Wide spread epidemic in a country or a pandemic, which is wide spread disease in many countries of the world like COVID-19 are also disasters. In effective and timely management of such disaster, while medical teams handle the response to disaster in hospitals by professionally treating the patients, a large number of motivated, self-disciplined youth volunteer teams are also required by administration proactively for conducting awareness campaigns well in time, to ensure safe practices for control/reduction of the spread of the disease as well as for other support duties. The members of such teams must be able to cope with risks/stress as well as must have empathy towards the citizens, when involved in disaster risk mitigation supportive tasks

Pandemic Covid-19 and Challenges

The virus that causes disease Corona virus 2019 (COVID-19) has been named as Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2). It is a new strain discovered in 2019, which was not found previously in humans. SARS-

CoV-19 likely to have originated from bats and first of cases was reported from Wuhan, Hubei Province in China. The virus then spread outside China and subsequently, to the rest of the world via human transmission. Several countries have now reported its spread. The first case of Covid-19 was reported in India on 30 Jan 2020 in Kerala, patient being a student, returned from China. The World Health Organization (WHO) declared corona virus disease as a pandemic on March 11, 2020. This highly infectious virus enters human body through nose, mouth or eyes. It affects upper respiratory tract (airways from nose to vocal chords) and then can spread in to lungs. In very serious cases, infection can lead to acute respiratory distress syndrome or even death. This virus is present in droplets, which comes out during sneeze or cough and thus infect other humans in vicinity of 1 meter distance. Infection from this virus also gets transmitted to human through contaminated surfaces. This virus disproportionately affects older people (>65years) and those having pre existing critical diseases. Soaps and alcohol based sanitizers destroy this virus. There is no proved vaccine available as of now for this virus in the world, though many research and trials are on. The infection through this virus spread in human in geometric progression (multiplying).

To safeguard against this disease and control the spread, following precautionary measures (Best Practices) have been recommended for all citizens for strict compliance.

- Wearing a face mask covering nose and mouth when outside the home
- Social distancing in vital at all times of minimum one meter
- Frequent washing of hands with soap (minimum 20 seconds)
- Disinfecting hands with minimum 70 percent alcohol concentration based sanitizers (where hand washing not possible)
- Disinfection process similarly of common surfaces in houses/offices
- Avoid touching your nose, mouth and eyes with hands without washing/disinfecting
- Avoid going to crowded areas
- Isolation strictly at home if not well (temperature/dry cough/mild flu)

Considering this unprecedented situation of disaster, need for mass awareness and enforcement of above safe practices as the biggest challenge, civil administration needed large numbers of selfless motivated trained and disciplined uniformed youth volunteer teams of clear identity to augment the human resources.

REVIEW OF LITERATURE

Study and detailed review of National Disaster Management Act 2005 (NDMA 2005), National Policy of Disaster Management 2009 (NPDM 2009), National Youth Policy 2014 (NYP 2014) and National Disaster Management Plan 2016 (NDMP 2016) brings out that in all these policies and plans, though involvement/engagement of youth power during disaster management in India has been broadly mentioned, however no guidelines for engagement/age group/scope/phases/control/logistics support/recommended tasks have been clearly laid down in them.

National Cadet Corps and Organizational Strengths

National Cadet Corps (NCC), with its motto “Unity and Discipline” is the largest uniformed tri service youth organization in India with strength of about 1500000 volunteer student cadets. The organization has it’s headquarter in New Delhi. The

organization has 17 directorates at state levels and group headquarters at district levels. All NCC cadets are put through various programs through institutional training of NCC including outdoor field camps of ten days duration, aimed to groom them as highly motivated, patriotic, disciplined, critical thinking young all round leaders with empathy, soft skills and confident communication skills. They also go through formalized disaster management training capsule as well as training in primary medical health and hygiene at first aid level as part of NCC training curriculum. Junior division (JD) and senior division (SD) are for boys where as Junior wing (JW) and senior wing (SW) are for girl cadets.

Engagement of National Cadet Corps Cadets in Covid-19

To augment the human resources on ground to fight against Covid-19, Government of India, at the highest level, considered the inherent strength of NCC organization and had decided to engage them formally. The directives were issued to NCC Headquarters at New Delhi by Ministry of Defense. Though NCC cadets have been involved in many previous disasters like, Tsunami 2004, Orissa cyclone 2009, Chennai Floods 2015, Kerala Floods 2018, and Mumbai Floods 2019 during relief operations, only as self volunteers, NCC organization was not formally requisitioned and engaged by the government. There were no detailed guidelines existing in disaster management plans and policies for state/district administration to engage youth/young student NCC cadets in disaster mitigation or response phases, considering the risk and stress involved.

General Guidelines for Engagement of NCC Cadets for Risk Mitigation

Essential broad guidelines for engagement of Youth/Student NCC cadets in disaster risk mitigation were formulated for the first time. These included:

- Envisaged Tasks
- Request for tasking from State/District administration
- Likely Duration
- Only day tasking or day/Night tasking
- Only volunteer senior division/senior wing cadets above 18 years of age
- No engagement of NCC cadets in handling law and order situations
- No engagement of cadets in containment zones
- Risk assessment and safety and security arrangement for cadets at all times
- Engagement of NCC cadets always in a team of 8 to 20 under supervision
- Factoring all essential administration and logistics requirements
- Consent from parents
- NCC cadets and supervisory staff to be in uniform
- Detailed briefing, equipping and training of cadets for task envisaged
- Consideration of gender sensitivity wherever girls cadets(SW) to be involved

Operation Exercise Yogdan

Based on the general guidelines, peculiarity of needs during COVID19, specific guidelines were promulgated by NCC directorate for engagements of cadets in Tamil Nadu, Puducherry, Andaman and Nicobar Islands, the areas under its jurisdiction and the area of present case study. This engagement of NCC cadets in risk mitigation during Covid19 was code named as “Operation Exercise Yogdan”. Following tasks were envisaged post discussions by the state governments/district administration and requisitioned for deployment of NCC cadets at district level only for day time duration from 01 Apr-20 may 2020:

- Manning of help centers/control rooms
- Requesting and enforcing queues/social distancing at banks/ATMs/Post offices/prominent grocery stores/vegetable shops/pharmacy
- Ensuring availability of alcohol based hand sanitizers at these places
- Requesting and enforcing people to put on face mask/distribution of masks on the spot
- Traffic management
- Community awareness through posters and banners for safe practices at various noticeable places
- Distribution of relief material/medicines/food/essential commodities
- Community assistance specially to elderly people
- Blood donation (if required in emergency) of specific blood group At all locations, following were ensured by NCC directorate/Group Headquarters in close liaison with state government/district administration:
- PPE kit for each cadet (gloves mask and a simple glass shield)and a hand sanitizer
- Detailed briefing for various tasks, orientation and demonstrations to ensure self protection.
- Disinfection drill for own set up, tents and equipments and availability of the material
- Appropriate passes from administration during lockdown/curfew
- Administrative and logistics support

OBJECTIVES OF STUDY

- To evaluate the efficacy and adequacy of newly formulated guidelines for engagement of youth/NCC Cadets in disaster mitigation tasks.
- To assess the effectiveness of engagement of NCC cadets in disaster mitigation during COVID-19
- To examine the impact of engagement of young NCC cadets during COVID-19 on society and officials of civil administration
- To suggest a set of guidelines as policy recommendation for engagement of NCC cadets/youth organizations for inclusion in national as well as state disaster management plans for mitigation as well as response phases.

RESERCH METHODOLOGY

- Sampling technique: Descriptive- Evaluative method using survey through questionnaire.
- Sample size:- (a) 120 Citizens and Government officials
(b) 250 NCC cadets (SD & SW only)
- Sampling type:-Simple random sampling
- Population :- (a) Large civil administration officials and citizens
(b) 3310 NCC cadets engaged during COVID-19
- Data Collection:- mostly primary data

HYPOTHESIS TESTING

- **H0:** Effectiveness of cadets in engagement during disaster risk mitigation duties depends on quality and curriculum of NCC institutional training.
- **H1:** Effectiveness of cadets in engagement during disaster risk mitigation duties does not depend on quality and curriculum of NCC institutional training.

DATA ANALYSIS

Table 1: Engagement Pattern of NCC Cadets

	Senior Division Boys(SD)	Senior Wing Girls(SW)	Total
Tamil Nadu	2218	763	2981
Puducherry	54	35	89
Andaman& Nicobar Is	25	15	40
Total	2297	813	3310

NCC cadets engaged during COVID -19 duties in Tamil Nadu
Figure 1

■ SD(boys) ■ SW (girls)

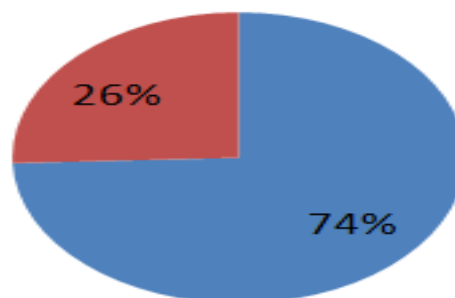


Figure 1: NCC Cadets Engaged During Covid-19 Duties in Tamil Nadu.

NCC cadets engaged during COVID -19 duties in Tamil Nadu
Figure 2

■ SD(boys) ■ SW (girls)

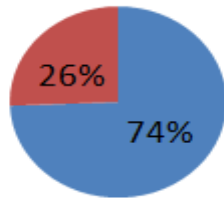


Figure 2: NCC Cadets Engaged During COVID19 Duties in Tamil Nadu.

NCC Cadets engaged in COVID-19 duties in Puducherry
Figure 3

■ SD (boys) ■ SW (girls)

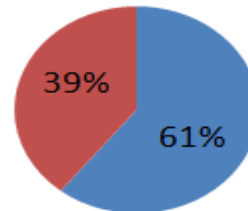


Figure 3: NCC Cadets Engaged During COVID19 Duties in Puducherry.

NCC cadets engaged during COVID -19 duties in Andaman & Nicobar Islands
Figure 4

■ SD(boys) ■ SW (girls)

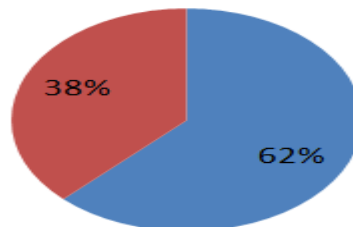


Figure 4: NCC Cadets Engaged During COVID19 Duties in Andaman & Nicobar Islands.

Opinion Survey/Feedback about Engagement of NCC Cadets in COVID-19 for Disaster Risk Mitigation Duties to Assess the Overall Impact

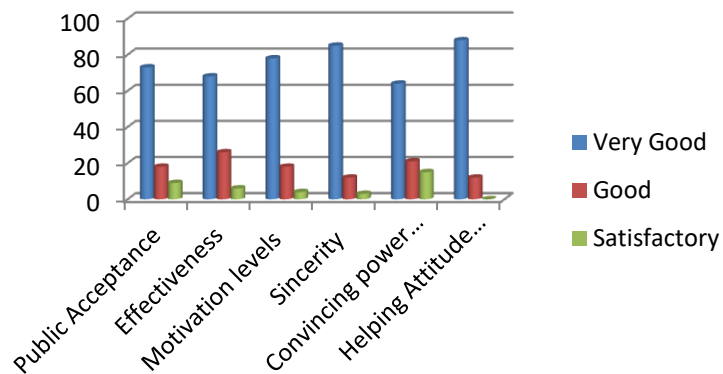


Figure 5

Usefulness of NCC Training Curriculum Found During Engagement Duties during COVID-19

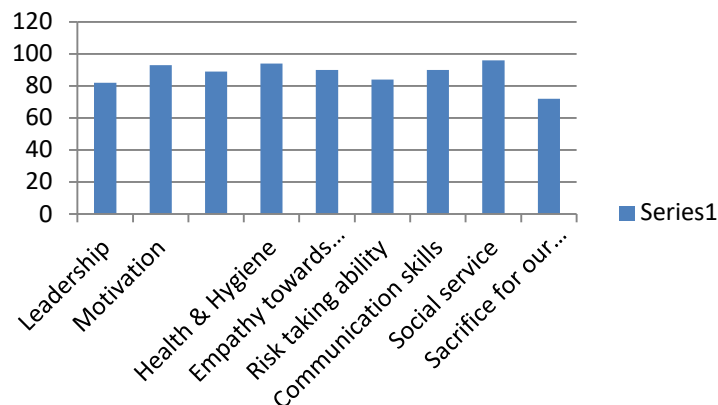


Figure 6

Efficacy & Adequacy of New Detailed Guidelines for Engagement of NCC Cadets/Youth in Disaster Management

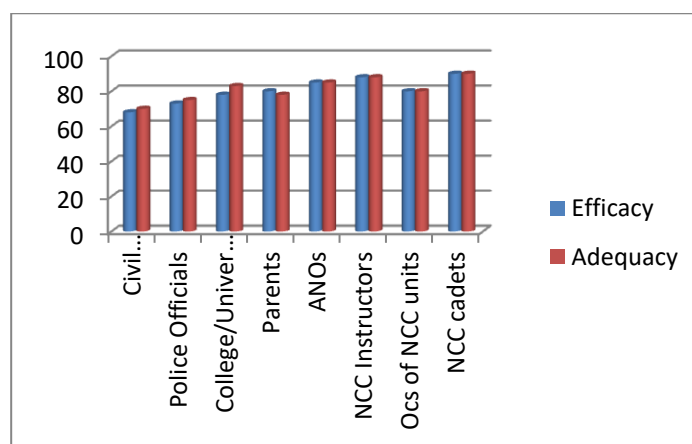


Figure 7

FINDINGS OF THE STUDY

- During COVID-19, for risk mitigation duties, 74 % SD cadets and 26 % SW cadets were engaged by the civil administration on requisition for various duties in Tamil Nadu, Puducherry, and Andaman & Nicobar Islands. Engagement for duties connected with risk mitigation was from 01 Apr2020-20 May2020, mainly during total lockdown (1.0), nationally.
- Overall impact of engagement of NCC cadets in disaster risk mitigation duties during COVID19 has been rated 76 % very Good, 18 % Good and 6 % satisfactory by various civil administration, police, bank officials and citizens, which is highly encouraging. This includes special feedbacks by Lieutenant Governor of Puducherry and Lieutenant Governor of Andaman & Nicobar Islands.
- NCC cadets engaged in disaster risk mitigation duties during COVID-19 felt that effectiveness in their assigned tasks completion was 88% due to their high quality institutional training curriculum. It was also observed that not a single cadet during this deployment fell ill/got infected with COVID-19.

- Most stake holders including civil administration, police, educational institutions, ANOs, OCs of NCC units, NCC instructors and cadets found the newly formed and practiced guidelines for engagement of NCC cadets/youth organizations very good and rated them 80 % for efficacy and adequacy.
- To test the hypothesis and in order to test the relationship between NCC training curriculum and effectiveness in engagements of cadets in disaster risk mitigation tasks, Chi Square test was done using R software.
- Table 2 shows Therefore Null hypothesis (Ho) is accepted i.e. Effectiveness of cadets in engagement during disaster risk mitigation duties depends on quality and curriculum of NCC institutional training.

Table 2: Chi Square Test

Calculated value of Chi Square (A)	10.974
Level of Significance	0.05
Degrees of freedom	6
Table value of Chi Square(at 5 % level) (B)	12.592
Result	Calculated value (A) is less than Table value (B)
Inference	Not Significant

CONCLUSIONS

Disasters risk mitigation is the key area to plan train and prepare proactively for disaster management. NCC and youth organization when engaged under detailed guidelines can be the force multiplier for the civil administration in handling the crisis. This case study of engagement of NCC cadets for risk mitigation during COVID19, under newly promulgated guidelines, has shown that institutional training of cadets cover all aspects of disaster management and when engaged in risk mitigation duties, NCC cadets were very effective. Public acceptance of request/advice/orders from NCC cadets in uniform was also very high. All stake holders found these new guidelines highly acceptable. Therefore, these new proved guidelines must be incorporated now formally in our national and state disaster management policy and disaster management plans. Young energy, sense of achievement, technical knowledge, pride in working for countrymen in need and empathy along with disciplined institutional training of NCC can be positive game changer in disaster management when NCC cadets are engaged by civil administration in organized preplanned tasks as part of capacity building.

REFERENCES

1. *National Disaster Management Act, 2005, Government of India.*
2. *National Policy of Disaster Management 2009, Government of India.*
3. *National Youth Policy, 2014, Government of India.*
4. *National Disaster Management Plan, 2016, Government of India.*
5. *State Disaster Management Plan, 2018, Government of Tamil Nadu.*
6. *Landsman & Burke, 2017 Landesman's Public Health Management of Disasters, Apha press.*
7. *Gupta HK, 2003, Disaster management, University press.*
8. https://www.undp.org/content/dam/india/docs/disaster_management_in_india.pdf.

9. Singh Bhupender & Shejwal BR, 2017, *Role of Mental image and personality in emotions and affect among NCC cadets*, *Journal of the Indian academy of Applied Psychology*, vol43, issue 2.
10. Jansi M & Anbazhagan, 2017, *personality traits among NCC and non NCC college students*, *ISRJ*, ISSN2231-5063, vol6, issue 9.
11. Debnath, R., & Bardhan, R. (2020). *India nudges to contain COVID19 pandemic: a reactive public policy analysis using machine-learning based topic modeling*. arXiv preprint arXiv:2005.06619.
12. Swain M & etal, 2006, *Disaster and Gender*, *Serials Publications*, New Delhi.
13. <https://www.businessinsider.in/india/news/defence-minister-reviews-ncc-work-in-covid-19>.
14. Jesudesan & Prasad. PTI news, Apr 07, 2020, *NCC cadets join fight against COVID-19*.
15. PTI, 05 May, 2020, *Defence Minister reviews NCC work in COVID-19*.
16. Modi PD & etal, 2020, *COVID-19 Awareness among Healthcare Students and Professionals Cureus 12(4): e7514. DOI 10.7759/cureus.7514*.
17. *Directives of Government of India to HQNCC, New Delhi, dated 26 mar2020*.
18. Kothari CR (2004), *Research Methodology*, *New Age International Publishers Limited, Limited, New Delhi*.
19. *NCC Hand book*.

