Azadi Ka Amrit Mahotsav

nidm
Resilient India - Disaster Free India

सत्यमेव जयते

adpc

National Institute of Disaster Management (NIDM), Govt. of India in association with Asian Disaster Preparedness Center (ADPC)

is organizing a 3 day Online training program on

'Post-Disaster Housing Reconstruction: Lessons from the Past and Future Aspects'

Patrons

Maj Gen M K Bindal
Executive Director, NIDM,
MHA, Government of India

Mr. Hans Guttman,
Executive Director,
ADPC

Expert Dignitaries

Shri Kamal Kishore,
Member, NDMA
Government of India

Shri Pradeep Kumar Jena, (IAS),
Additional Chief
Secretary of Odisha

Prof. Dr. Ravi Sinha,
IIT Bombay

Prof. Dr. Chandan Ghosh,
Head, Resilient
Infrastructure Division, NIDM

Guidance

Mr. Aslam Perwaiz
Deputy Executive Director,
APDC

Convener

Dr. Garima Aggarwal,
Senior Consultant, Resilient
Infrastructure Division, NIDM

Dr. Sanjay Srivastava,
Chief, Disaster Risk Reduction,
UNESCAP

Dr. Animesh Kumar,
Head, UNDRR Office in
Bonn

Mr. Anshu Sharma,
Co-Founder, SEEDS
India

Coordinators

Apibarl Bunchongraksa,
APDC

Susmita P.
Young Professional,
Resilient Infrastructure, NIDM

08 -10 September, 2021 Time: 1200 to 1400hrs (IST)

Registration link: https://training.nidm.gov.in/

WebEx link:
https://nidmmhaindia.webex.com/nidmmhaindia/onstage/g.php?MTID=edf5a3075ac0654f817105117a055df5f
Passcode : 2021

YouTube Links:
Day 1 - https://youtu.be/K-pm_LdgolE
Day 2 - https://youtu.be/OVbwQrKzy6E
Day 3 - https://youtu.be/EwhzFhY5IQY

Stay Protected from Corona

Wear your Mask Properly

Follow Proper Hand Hygiene

Maintain Social Distancing

Get Vaccinated

/ nidmmhaindia / nidmindia

Website: www.nidm.gov.in

Training Program on

Post-Disaster Housing Reconstruction: Lessons from the Past and Future Aspects

Dates: September 8 to 10, 2021 [1200 to 1400 hrs. India Time]

"Rebuilding safer housing for the future"

CONCEPT NOTE

1. Over the past few decades natural hazards are causing loss of lives and large-scale damages to the built-up environment worldwide which results in economic losses, the severity of which depends upon the affected community's resilience and infrastructure available. As per the United Nations (UN) report titled 'Economic Losses, Poverty and Disasters 1998-2017', globally, the affected countries reported direct economic losses of $2908 billion due to natural disasters during the last two decades. Natural disasters are projected to increase in many regions due to the growing exposure of human activities, combined with increasing vulnerability and the effects of climate change and global warming. [1]

2. India is amongst the largest countries both in terms of size and population in the world. The diverse geo-climatic conditions as well as high degree of socio-economic vulnerability of the country make it one of the most disaster-prone countries. The country has been experiencing a number of natural disasters, particularly earthquakes, flood, cyclone and landslides. Due to the sub-continental size, geographical location and rapid urbanization, the number of disaster events and as well as the physical and economic losses are very high in the country. The past experiences indicate that communities impacted with large-scale disasters like earthquakes could not bounce back to normal and further slipped into long-term poverty and deprivation due to loss of livelihood, houses, critical lifelines and human losses. As per the UN Report (referred in above para) India alone has suffered economic losses of $79.5 billion during 1998-2017**.**

3. In the last few decades, India has registered exponential growth of construction activities in the towns and cities. By 2025, Construction market of India is expected to emerge as the third largest globally[2]. In order to provide basic infrastructure and create good quality of life in the cities and towns, several central schemes viz. Smart Cities Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Heritage City Development and Augmentation Yojana (HRIDAY) and so on are being implemented by the Government of India. The Pradhan Mantri Awas Yojana (PMAY) is being implemented to build 50 million *pucca* (permanent) houses in the entire country, out of which 30 million are to be constructed in rural areas and remaining 20 million houses would be constructed in urban areas[3].

4. The Sendai Framework for Disaster Risk Reduction (SFDRR)[4] (2015-2030) was adopted by 187 nations including India, during the third UN World Conference on Disaster Risk Reduction (DRR), held in Sendai, Japan in 2015. The overarching intended outcome of the framework is substantial reduction of disaster risk and losses in lives, livelihood and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over

[1] https://www.unisdr.org/files/61119_credeconomiclosses.pdf
[2] https://www.investindia.gov.in/sector/construction
[3] http://mohua.gov.in/
[4] https://www.undrr.org/

the next 15 years. The implementation of the SFDRR would supplement and complement the efforts of nations and communities to prevent vulnerability to disasters, increasing preparedness for response and recovery, strengthening their resilience and promoting risk sensitive sustainable development. The framework outlines 7 targets and 4 priorities areas for action to achieve its objective.

5. The **Priority Area- 4 of the SFDRR** viz. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction, illuminate about "empowering vulnerable sections of the community including persons with disabilities to publicly lead and promote gender equitable and universally accessible response, recovery, rehabilitation and reconstruction approaches." Acknowledging this, **Priority 4 of the Sendai Framework seeks to enhance disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction.**

6. Government of India (GoI) had hosted the Asian Ministerial Conference for Disaster Risk Reduction (AMCDRR) 2016[5] at New Delhi, after the World Conference on SFDRR. The Conference was attended by more than 4500 official delegates including ministers, policy makers, experts and practitioners from the field of disaster management across the Asia-Pacific Region. During the Inaugural ceremony of the event, Hon'ble Prime Minister of India had presented a 10-point agenda on Disaster Risk Management (DRM). The first and foremost agenda on DRM highlights that *"all development sectors must imbibe the principles of DRM. This will ensure that all development projects - airports, roads, canals, hospitals, schools, bridges – are built to appropriate standards and contribute to the resilience of communities they seek to serve. Over the next couple of decades, most of the new infrastructure in the world will come up in our region. We need to ensure that we build it to the best available standards of disaster safety. All the public expenditure must take into account risk considerations. In India, the 'housing for all' programme and 'smart cities' initiative represent such opportunities".* Based on the roadmap presented by the Hon'ble Prime Minister, GoI has established an international Coalition for Disaster Resilient Infrastructure, which aims to promote the resilience of new and existing infrastructure systems to climate and disaster risks in support of sustainable development. [6]

Housing Reconstruction: Challenges and Opportunities

7. Globally, about one in seven people live in overcrowded, low-quality housing conditions with inadequate access to services (Mitlin and Satterthwaite, 2013). This generates new patterns of both extensive and intensive disaster risk, as low-income households are forced to occupy hazard-exposed areas with low land values, deficient or non-existent infrastructure and social protection, and high levels of environmental degradation (UNISDR, 2015).

8. Housing remains the most affected and costliest sector in post-disaster recovery and reconstruction. The main reason of severe damages in housing sector from the disasters such as earthquake, cyclone, floods and landslides, are the structural vulnerabilities (improper building design and construction practices, sub-standard and poor-quality material and workmanship), inadequate building codes & its poor enforcement, exposure of housing stocks in vulnerable areas, poor land-use planning and unplanned population growth especially in urban areas.

[5] https://www.unisdr.org/2016/amcdrr/wp-content/uploads/2017/10/AMCDRR-2016-REPORT-Final.pdf
[6] https://cdri.world/

9. Destruction of housing threatens the physical, social, emotional and economic fabric of affected households. The vulnerability of housing and the built environment constitutes the primary risk factor for loss of life and for a significant portion of economic loss during any major disaster event in low-income and developing countries. Likewise, the housing sector constitutes the largest financial item in post-disaster recovery programmes.

10. Housing in India often sustains the most severe destruction to its physical infrastructure and assets (damage) as a result of a disaster (barring the case of slow onset disasters such as drought). For example, the displacement and homelessness caused by river erosion has taken a major toll in Assam and other riverine areas. Rising sea levels have also threatened habitat and severe damage to houses in coastal area of India. Landslides and flash floods have displaced many people and left them homeless in Himalayan region such as Uttarakhand State.

11. Reconstruction efforts can be impeded through various factors. The studies on post-disaster reconstruction programmes highlights that immediate planning of reconstruction programs, arrangements for funds, relocation of the affected communities and early restoration of basic amenities and services are certain challenges which are to be addressed within a short span of time by the local agencies. Another set of issues are lack of access to resources, logistic impediments, and limited technical experts to manage the restoration, poor coordination, and pressure from the community for speedy recovery.

12. Post-disaster housing reconstruction presents an opportunity to not only rebuild safe housing for the affected population, but also to change construction practices so that local builders, engineers, and homeowners build resilient houses in the future. It also offers opportunities for changes in land-use practices and regulations related with building, settlements and infrastructure. The aim to “build back better” is the focus of post-disaster reconstruction. The reconstruction phases provide an opportunity to increase resilience of infrastructure and communities by integrating disaster resilience measures during the planning phase of reconstruction programs.

13. Odisha Super-cyclone (1999), Gujarat Earthquake (2001), Indian Ocean Tsunami (2004), Floods in Uttarakhand (2013) and Kerala Floods (2018) are few examples of such disasters, for which Government of India have implemented post-disaster reconstruction programmes with “Build back better approaches”. These programmes were implemented for the populations affected, and have addressed the issue of reconstruction, repairing, and strengthening traditional houses in rural and urban areas

14. There is a lot of scope to learn from past reconstruction programs, which need to be applied to wider practice of recovery. Some of the important aspects to learn from the past experiences are as follows:

- Knowledge of vulnerabilities inherent in communities and national housing stocks is essential for planning future recovery needs.
- Mitigating consequences before a disaster strikes, and addressing future vulnerability and risk in the event that disaster-related housing reconstruction is required.

- There is a need to build capacities of communities of practice including construction professionals including engineers, architects, urban / housing planners and builders in resilient construction practices.

15. The Online Training Programme (OTP) aims to provide an excellent opportunity for sharing the learnings and experiences from India and also from other countries as well, which too have a number of best practices that we can learn.

16. **Scope of the Training**
    - The three days training is designed for deepening the knowledge of the development and planning authorities, disaster management authorities, construction professionals, research scholars and educational institutes about the issues, future scopes, and possibilities in the field of 'building disaster resilient housing' and 'build back better'.
    - The training will also enhance the knowledge of participants on the institutional, policy, legal and fiscal factors in resilient housing reconstruction programme.
    - The training sessions will be delivered by the experts with professional excellence in this area.

17. **The key objectives will be:**
    - To understand the impacts of the disasters from worldwide previous experiences and case studies.
    - To explore the housing reconstruction best practices, lessons, policies and institutional arrangements.
    - To address the key issues in housing reconstruction in the case of India.
    - To discuss futuristic approaches and recommendations for the housing sector including new technologies and innovations.

18. **Target Audience:**
    - Development and planning authorities, disaster management authorities, construction professionals, research scholars, from all over India, as well as other participants from other willing nations.

Training Program on

Post-Disaster Housing Reconstruction: Lessons from the Past and Future Aspects

Dates: September 8 to 10, 2021 [1200 to 1400 hrs. India Time]

Training Program Agenda

Time [HRS]	Topics	Speakers
Day 1: 08.09.2021 (Wednesday)		
1200-1210	Welcome and Program Introduction	Dr. Garima Aggarwal, *Senior Consultant, NIDM*
1210-1220	**Welcome Address**: Building Capacities for Resilient Future	Major General M.K. Bindal, *Executive Director, NIDM*
1220-1230	**Keynote Address**: Disasters and Development Perspectives	Mr. Hans Guttman, *Executive Director, ADPC*
1230-1300	**Inaugural Address**: Built Environment and Disaster Reconstruction Issues	Mr. Kamal Kishore, *Member, NDMA, Government of India*
1300-1345	**Learning Session 1:** Housing Sector in Post Disaster Reconstruction	Dr. Sanjay Srivastava, *Chief, Disaster Risk Reduction, UNESCAP*
1345-1355	Questions and Answers	NIDM/ADPC
1355-1400	Summing up for the day	NIDM/ADPC
Day 2: 09.09.2021 (Thursday)		
1200 -1210	Proceedings of Day 1	Dr. Garima Aggarwal, *NIDM*
1210-1220	Key Note Address: Practices and new dimensions in Post-disaster housing reconstruction	Prof. Ravi Sinha, *IIT Bombay*
1220-1300	**Learning Session 2:** Housing Reconstruction Practices and Lessons Learnt	Mr. Aslam Perwaiz, *Deputy Executive Director, ADPC*
1300-1310	Questions and Answers	NIDM/ADPC
1310-1350	**Learning Session 3:** Strategic Transitions: Build Back Better and Risk Management Principles	Dr. Animesh Kumar, *Head, UNDRR (Bonn)*
1350-1355	Question and Answers	NIDM/ADPC
1355-1400	Sum up for the day	NIDM/ADPC
Day 3: 10.10.2021(Friday)		
1200 -1210	Proceedings of Day 2	Dr. Garima Aggarwal, *NIDM*
1210-1220	Keynote Address: Build-back-better approaches in housing reconstruction	Prof. Chandan Ghosh, *Head, Resilient Infrastructure Division, NIDM*
1220-1300	**Learning Session 4:** Key Issues, Challenges and Future Considerations in Housing Reconstruction	Mr. Aslam Perwaiz, *Deputy Executive Director, ADPC*
1300-1310	Questions and Answers	
1310-1350	**Learning Session 5:** Resilient Housing Framework in India: Innovations and Futuristic Recommendations [panel discussion moderated by ADPC]	*Panelist* Shri P.K. Jena, *(IAS), Additional Chief Secretary of Odisha - Chair* Mr. Anshu Sharma, *Co-Founder, SEEDS India* Prof. Chandan Ghosh, *NIDM*
1350-1355	Question and Answers	ADPC
1355-1400	Summing up and Vote of Thanks	NIDM / ADPC

Registration and Enrollment Process for NIDM Webinars and Online Training Programmes

Registration and Enrollment Process for NIDM Webinars and Online Training

Programmes Resilience Infrastructure Division - NIDM

PLEASE REGISTER FOR THE ONLINE TRAINING PROGRAM –

" Post Disaster Housing Reconstruction- Lessons from the Past and Future Aspects "

Join through this link after registration on 8th to 10th Sept, 2021, at 12 00 hrs to 14 00 hrs

WebEx link:

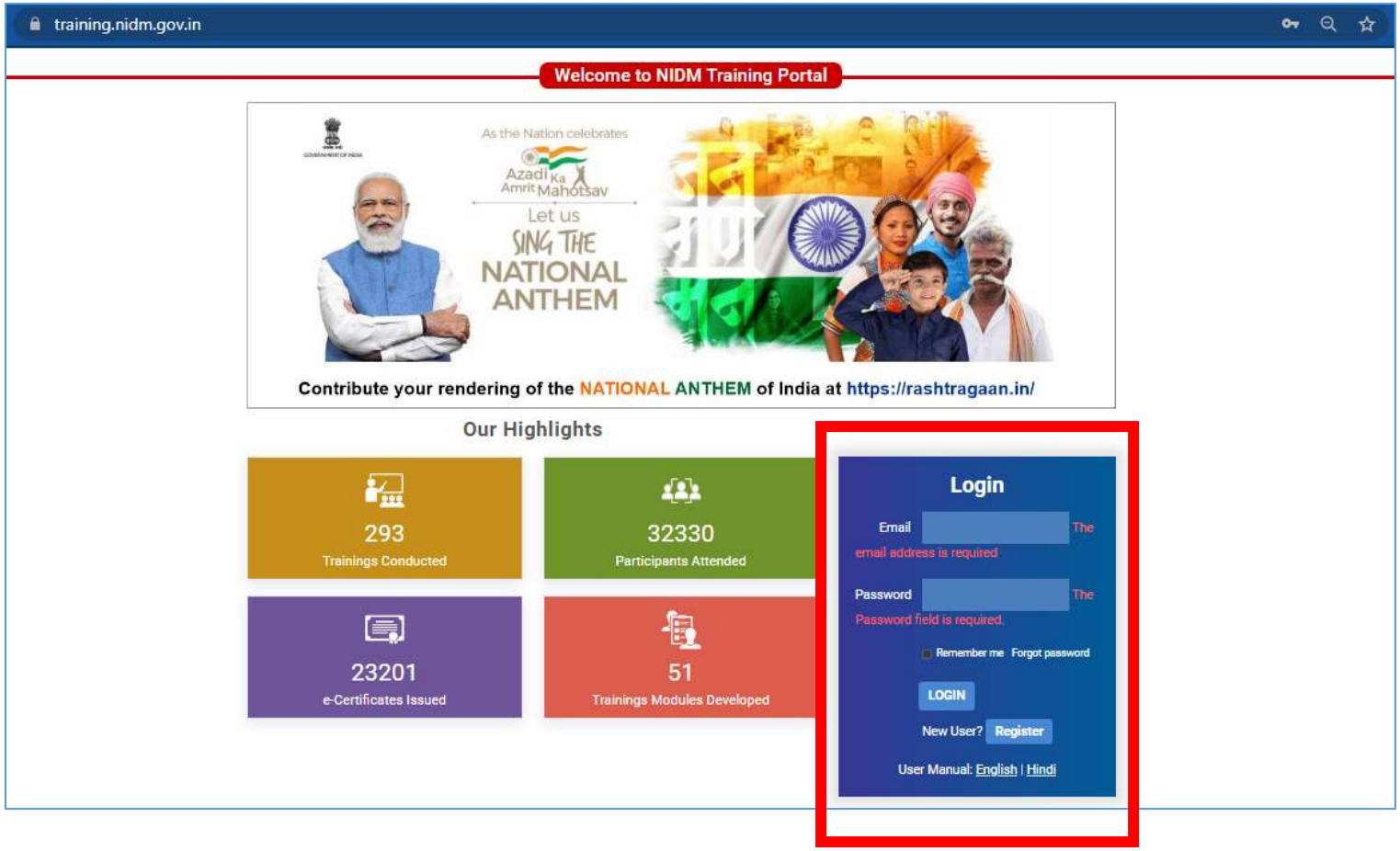
https://nidmmhaindia.webex.com/nidmmhaindia/onstage/g.php?MTID=edf5a3075ac0654f817105117a055df5f

Passcode : 2021

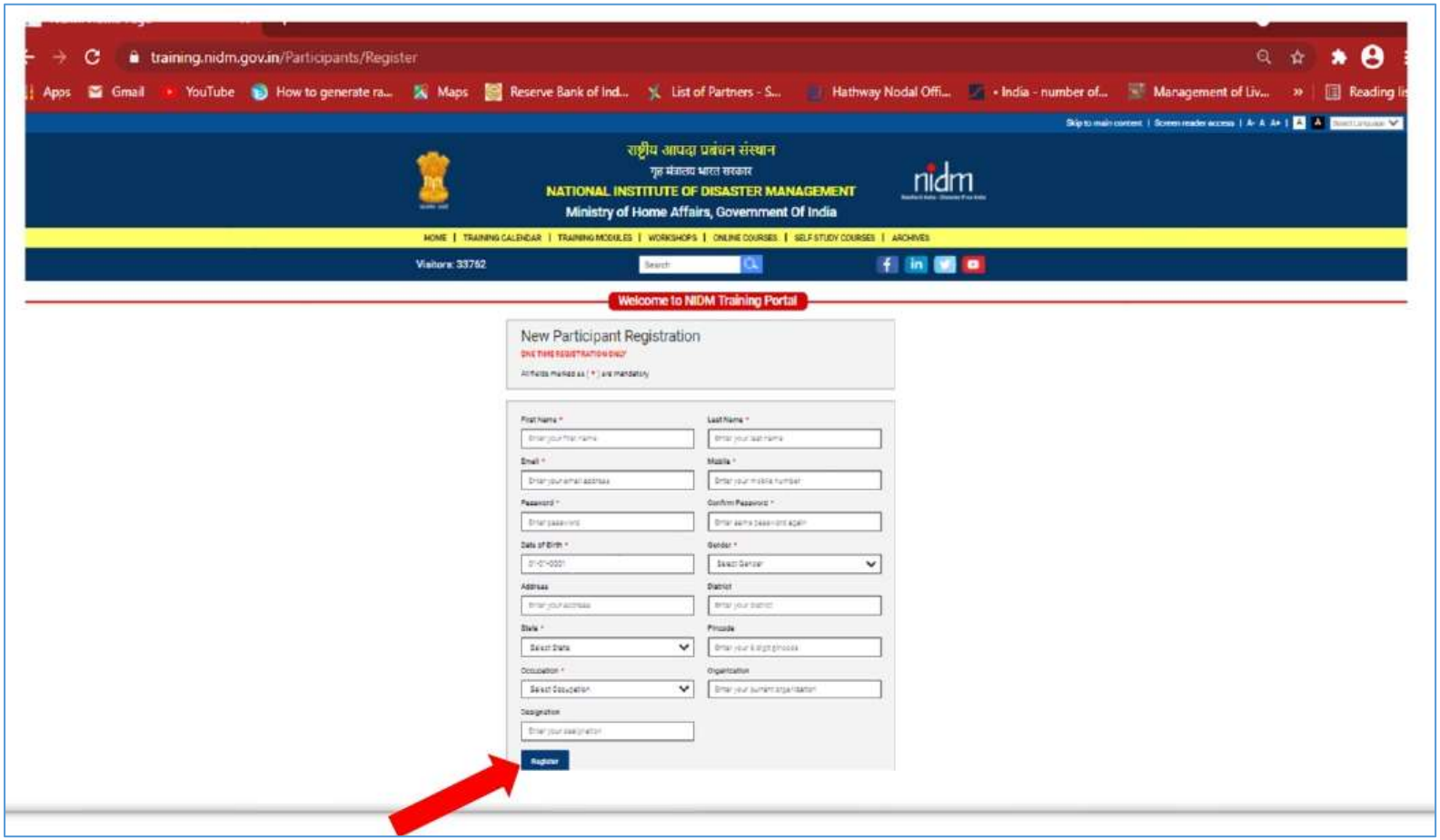
Registration and Enrollment Process for NIDM Webinars and Online Training Programmes

Step 1: Click on the link https://training.nidm.gov.in/

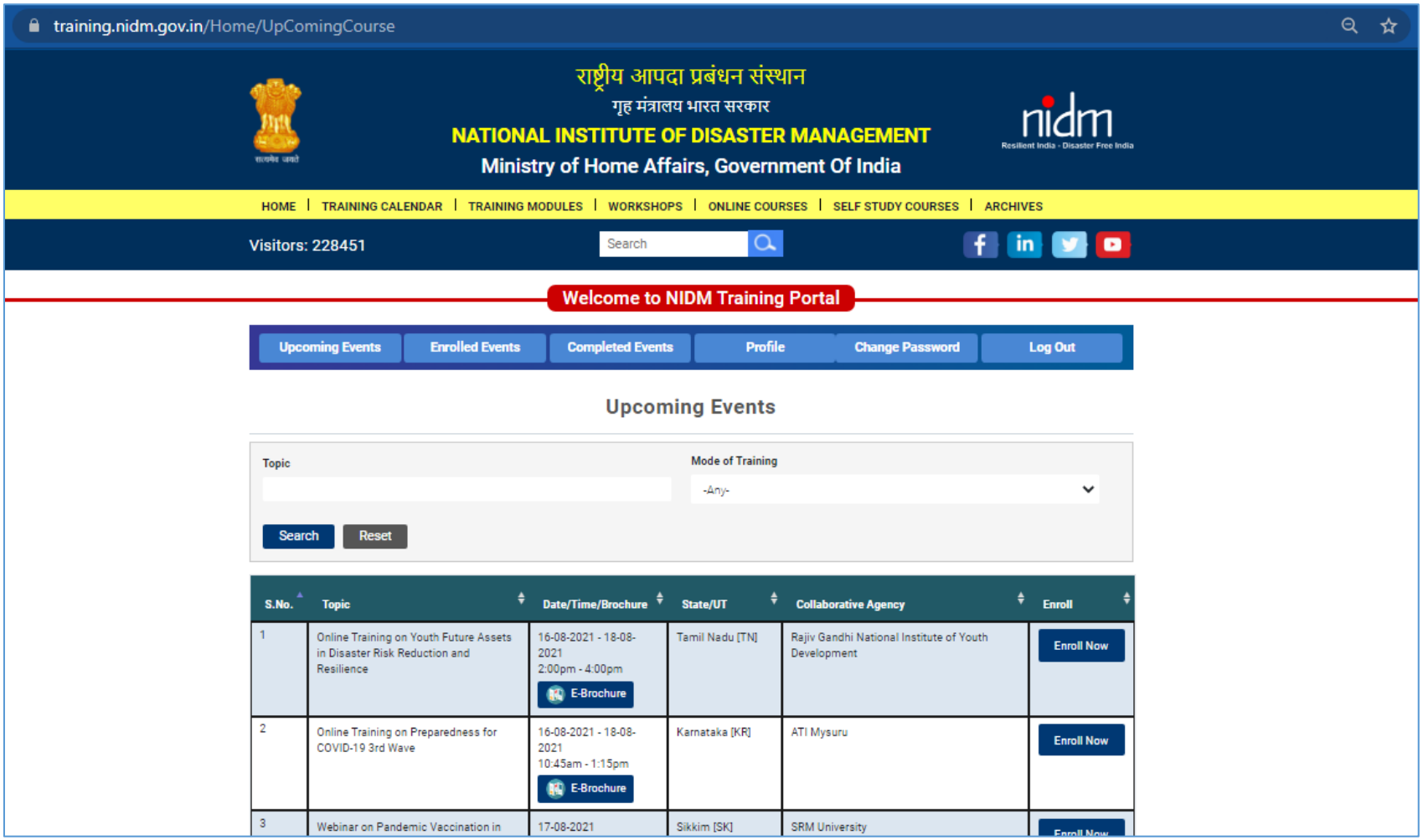
Step 2: Click on the Register Button as shown in the image below (In case you already registered you can login with your user id and password and proceed to Step 4.)



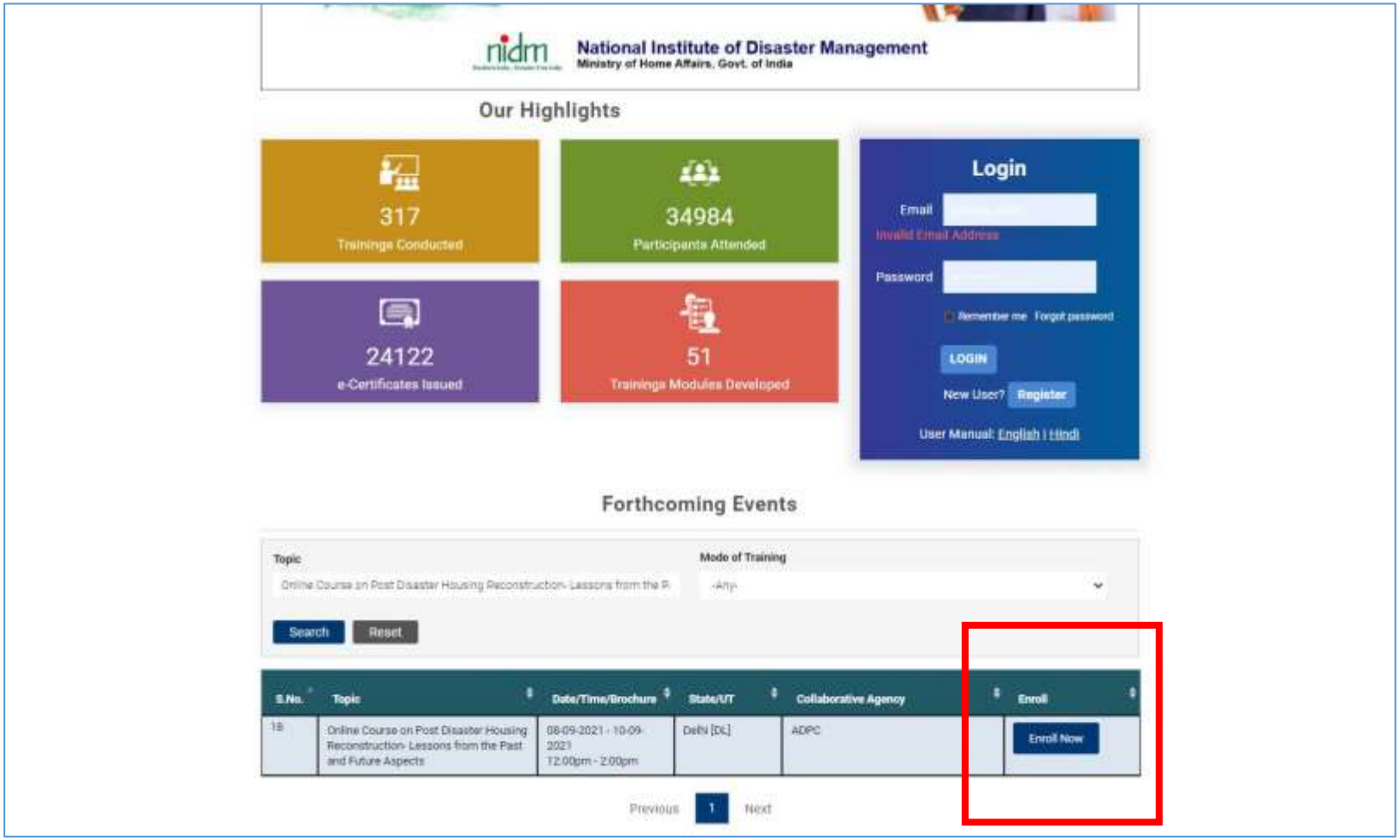
Step 3: Fill in the one-time registration form and click the Register button as shown in the image below. Please provide a valid email id to register and note down your password at a safe location, as you would be required to use these details for logging into the portal.



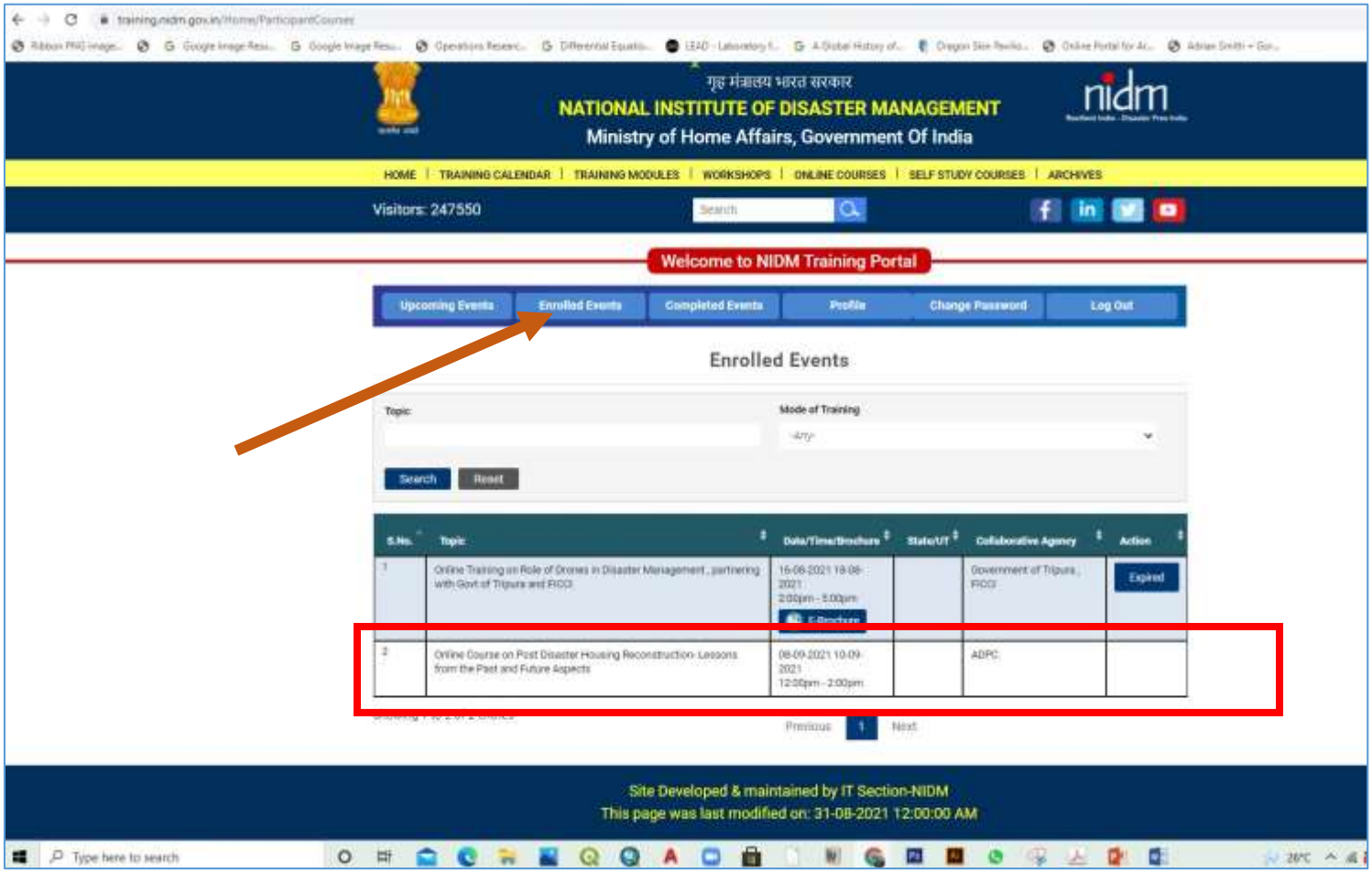
Step 4: You will be registered, and your profile will be created. Please click on the Upcoming Events button to view the list of the upcoming online training programmes, as shown in the image below.



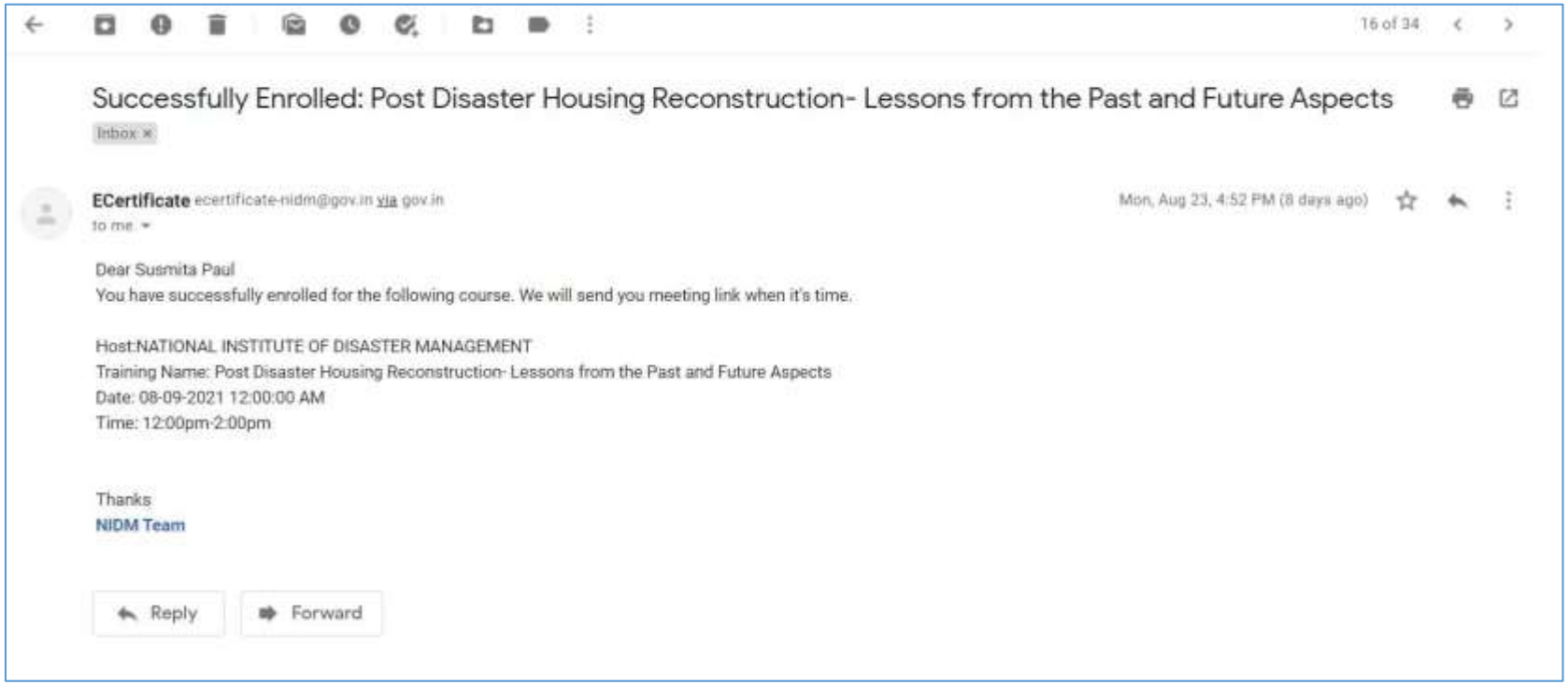
Step 5: The list of upcoming online training programmes will be loaded, please click on the "Enroll Now" Button to Enroll for any programme of your interest/choice, as shown in the figure below. You can enroll yourself for multiple programmes. Please enroll yourself for following programmes.



Step 6: Once you click the Enroll Now button, you will be enrolled for the respective programme. You can view the list of the programmes for which you have enrolled by clicking on the Enrolled Events link as shown in the figure below.



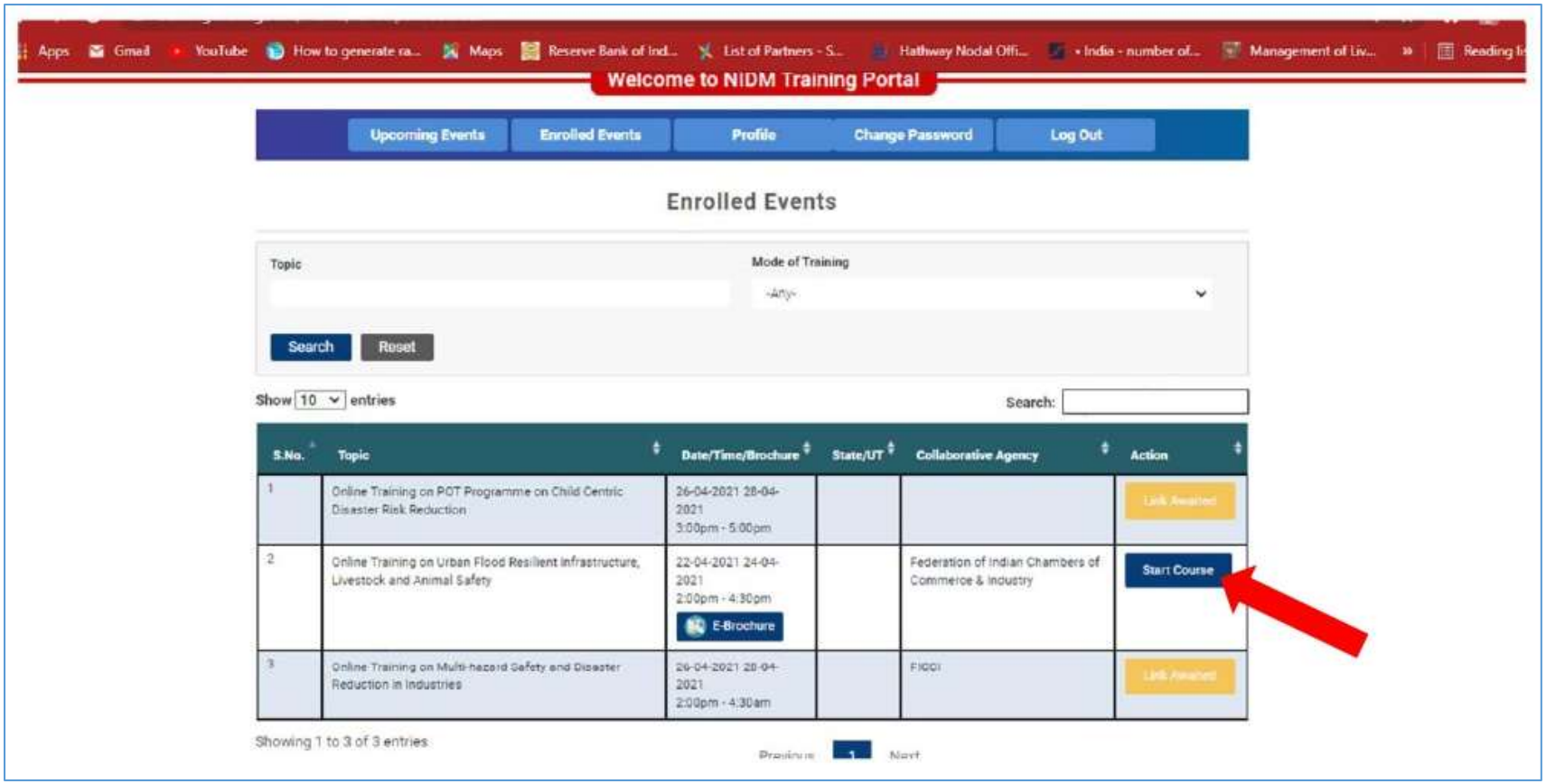
Step 7: You will also receive an email on your registered email id once you have successfully enrolled for an online training programme, as shown in the figure below.



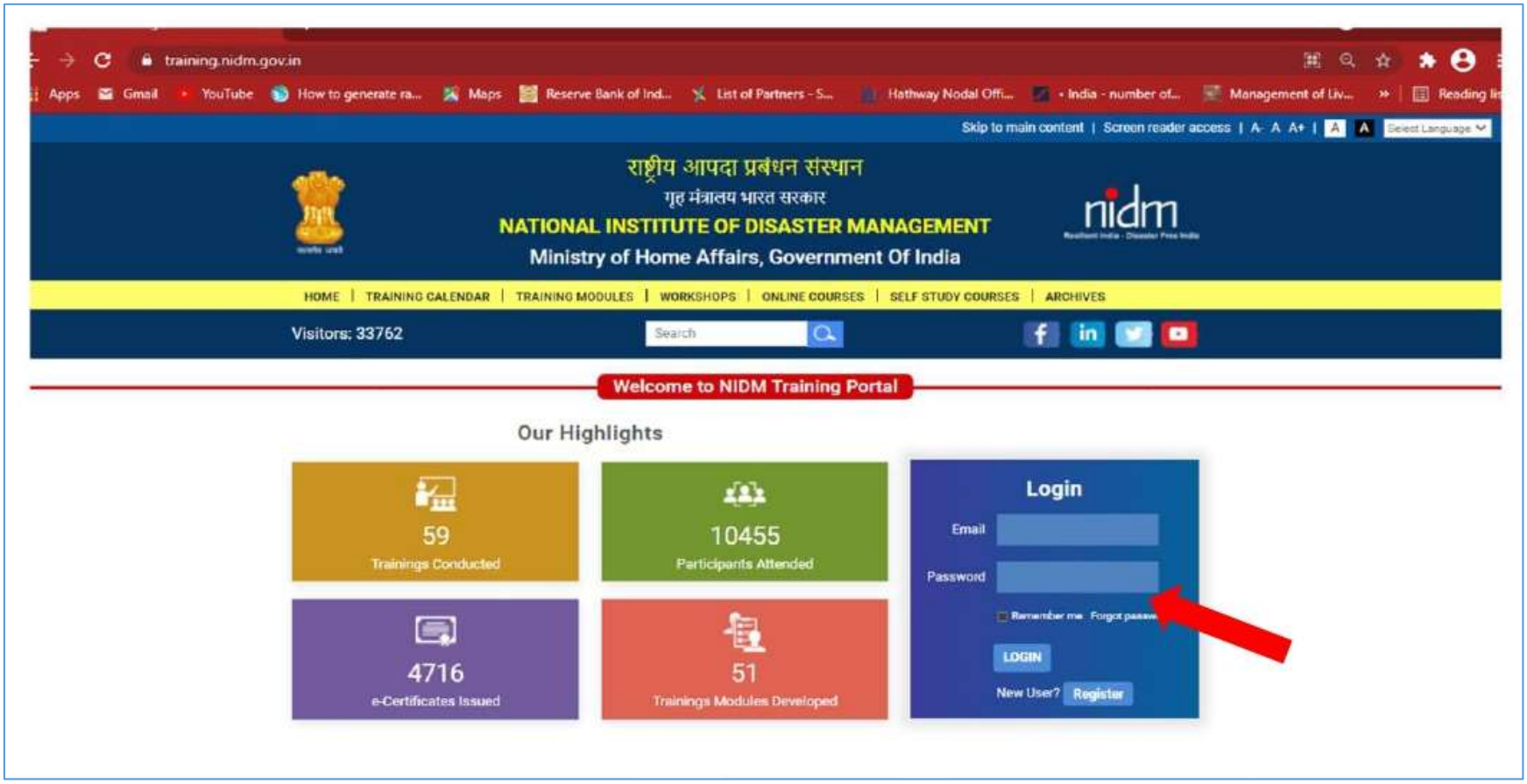
Step 8: The Cisco Webex/Zoom link to attend the online training programme will be emailed to you on your registered email id one day prior to the online training programme and also on the first day of the online training programme. The link to attend the Online Training Programme will remain same on all the 3 days.

PLEASE USE YOUR REGISTERED EMAIL ID (USED IN STEP 3 ABOVE) TO LOGIN TO WEBEX/ZOOM ONLINE PROGRAMMES. IF YOU USE A DIFFERENT EMAIL ID THE SYSTEM WILL NOT BE ABLE TO GENERATE E-CERTIFICATE OF PARTICIPATION FOR YOU.

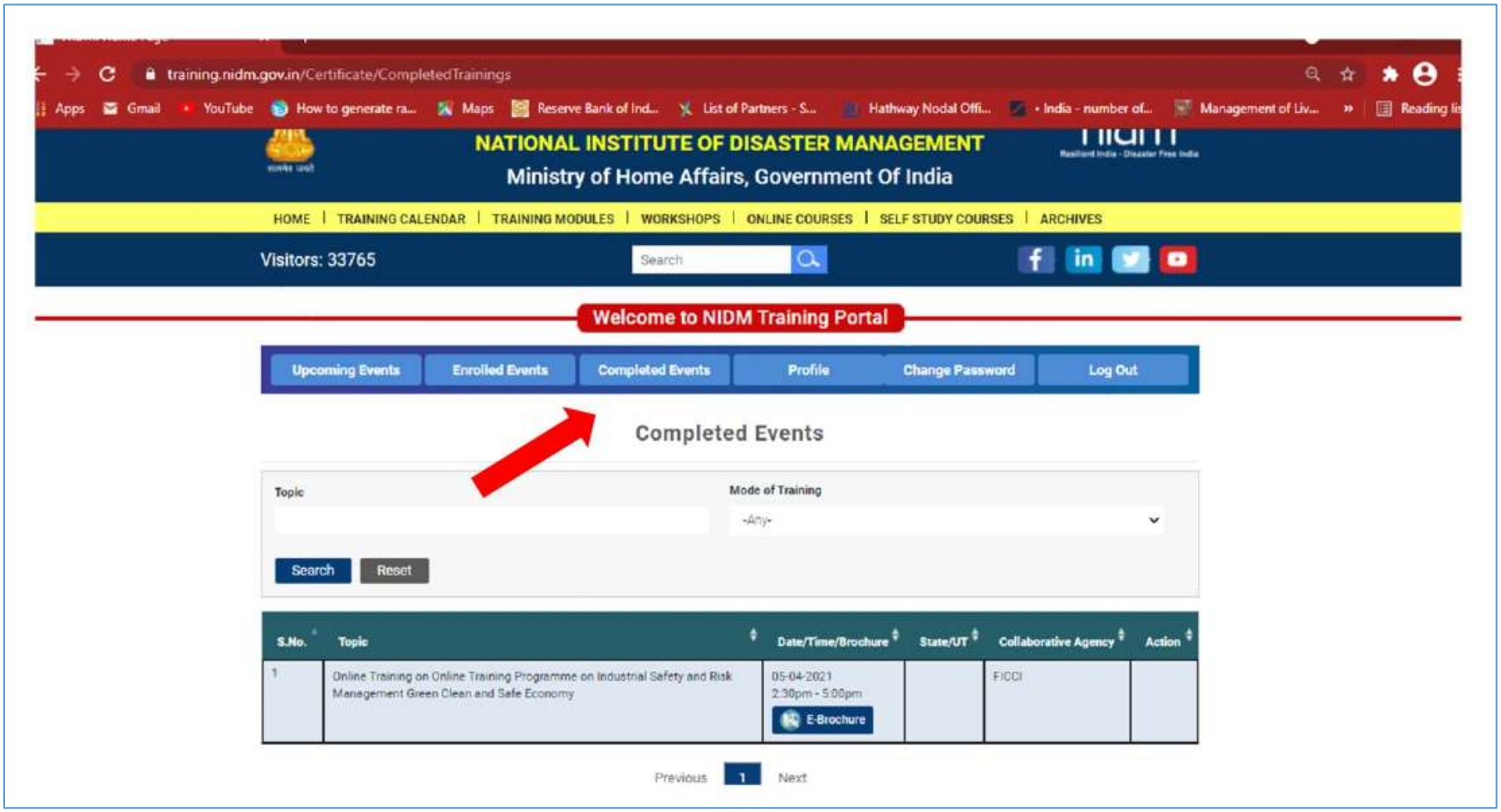
Step 9: The link to attend the online training programme will also be available on the NIDM Portal on the starting (first) day of the event (online training programme). To join the programme, you just need to login to the NIDM Portal with your userid and password and click on the Enrolled Events. Once the list of programmes for which you have enrolled loads, click on the Start Course button as shown below.



Step 10: Once the Online Training Programme is finished you have to login to the NIDM portal at https://training.nidm.gov.in/ Use your registered email id and password to login to download your E-Certificate of Participation 7-10 working days after the Online Training Programme is completed.

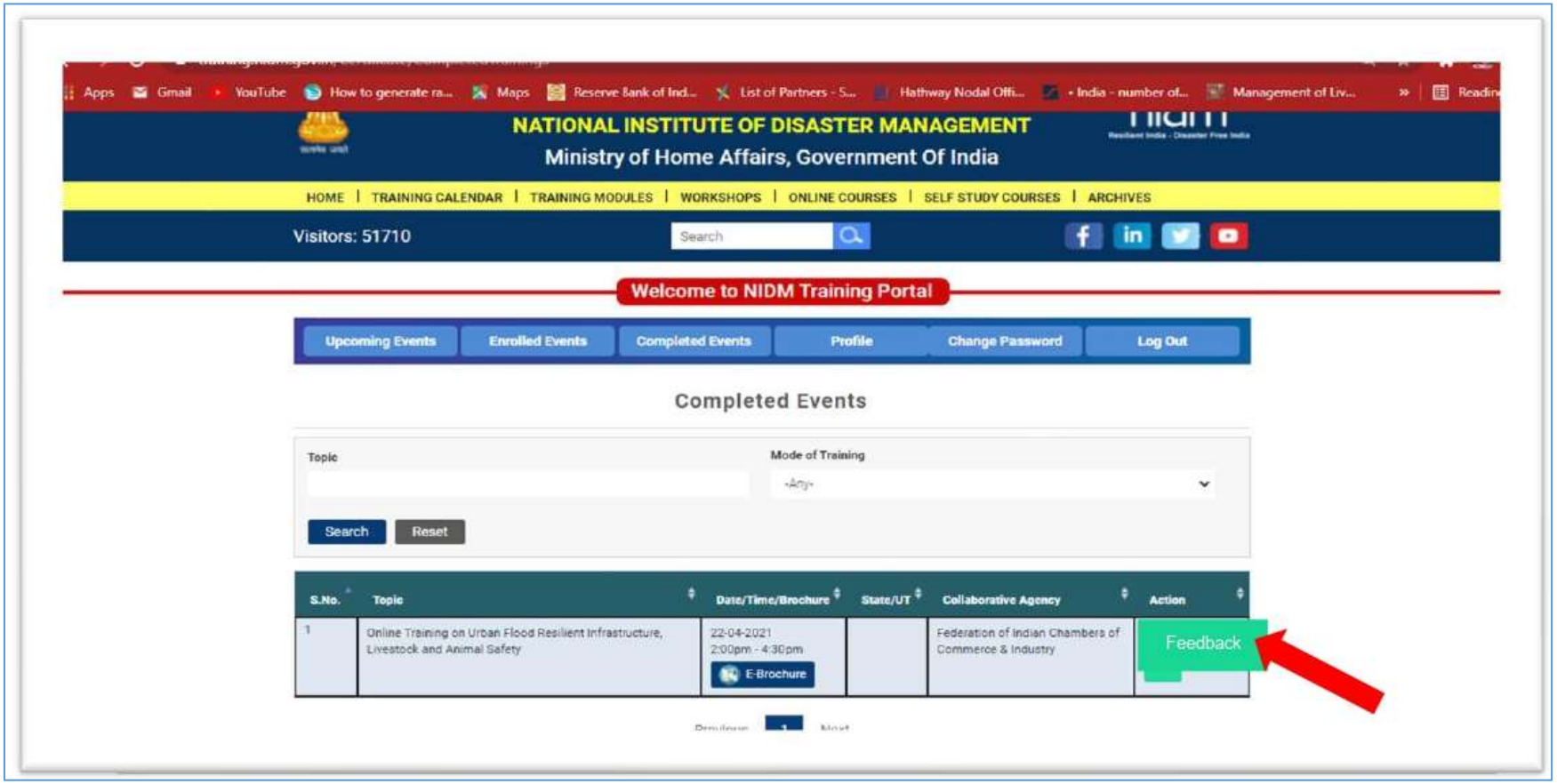
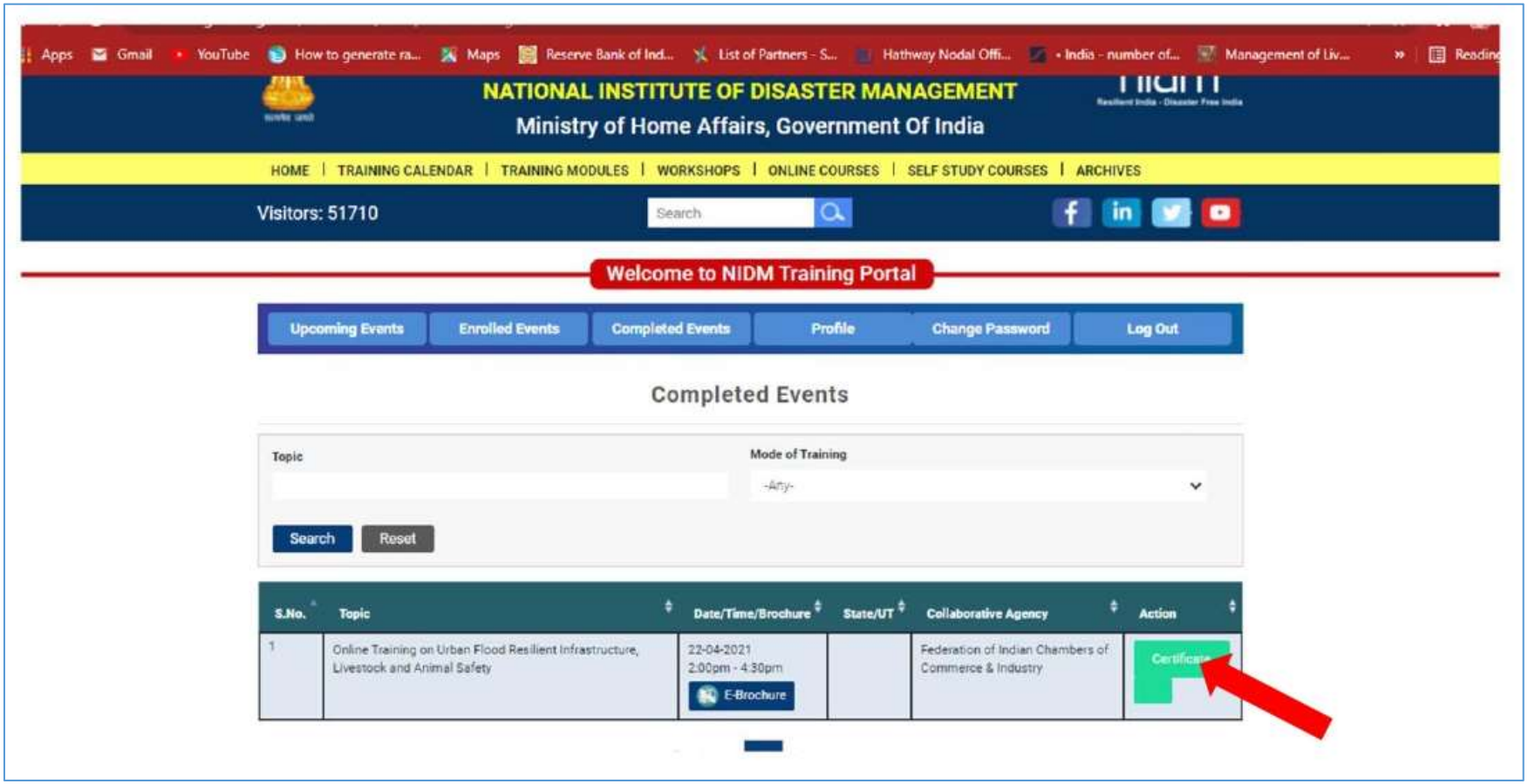


Step 11: Once you have logged in Click on Completed Events button as shown below.



Step 12: The list of events that you have attended and completed will be loaded. For each completed event, under the Action button you will see a link to the Online Feedback Form, please click on the link and fill in the feedback form.

(PLEASE NOTE IN ORDER FOR YOU TO BE ELIGIBLE TO OBTAIN AND DOWNLOAD E-CERTIFICATE OF PARTICIPATION YOU NEED TO ATTEND THE FULL PROGRAMME ON ALL THE 3 DAYS. IN CASE YOU HAVE NOT ATTENDED THE FULL PROGRAMME THE DOWNLOAD E-CERTIFICATE BUTTON WILL NOT APPEAR.)



Step 13: Once you have filled in the Feedback Form. The button to download the E-Certificate of Participation will be activated under the Action Tab as shown in the figure below. Click the button to download your E-Certificate of Participation.