

# #29 Development of a National Training Program for Biosafety and Biosecurity in Pakistan



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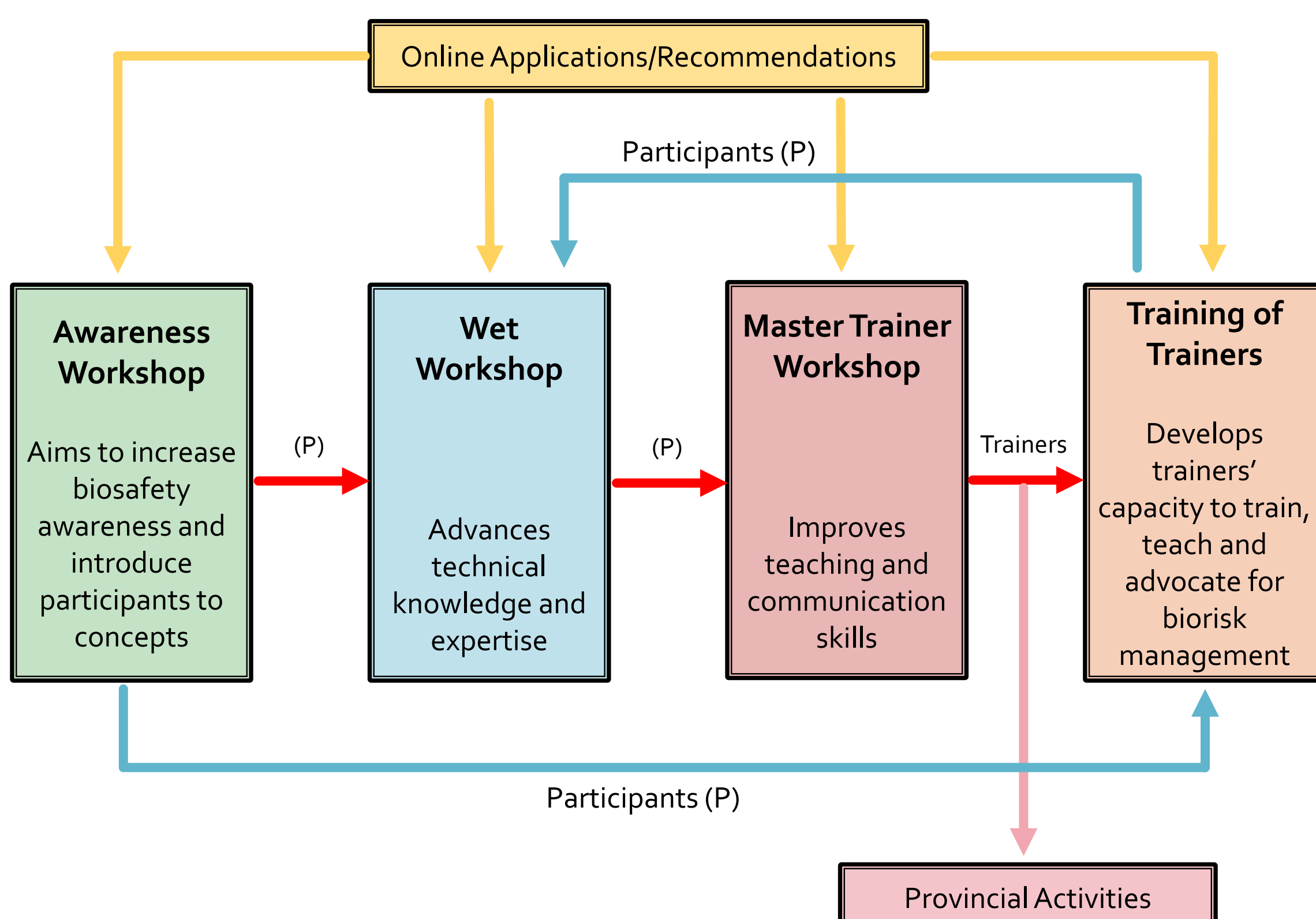


## Introduction:

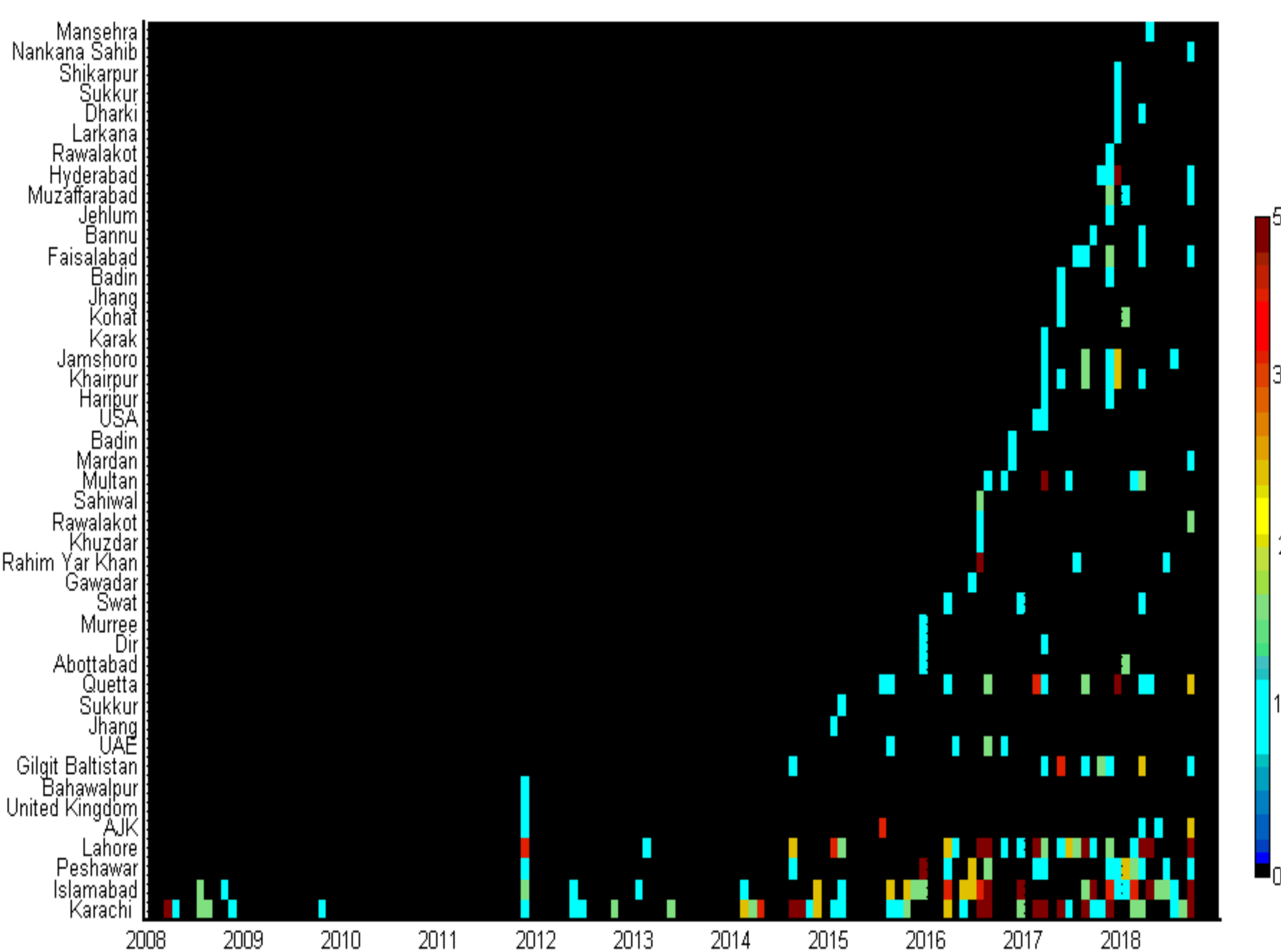
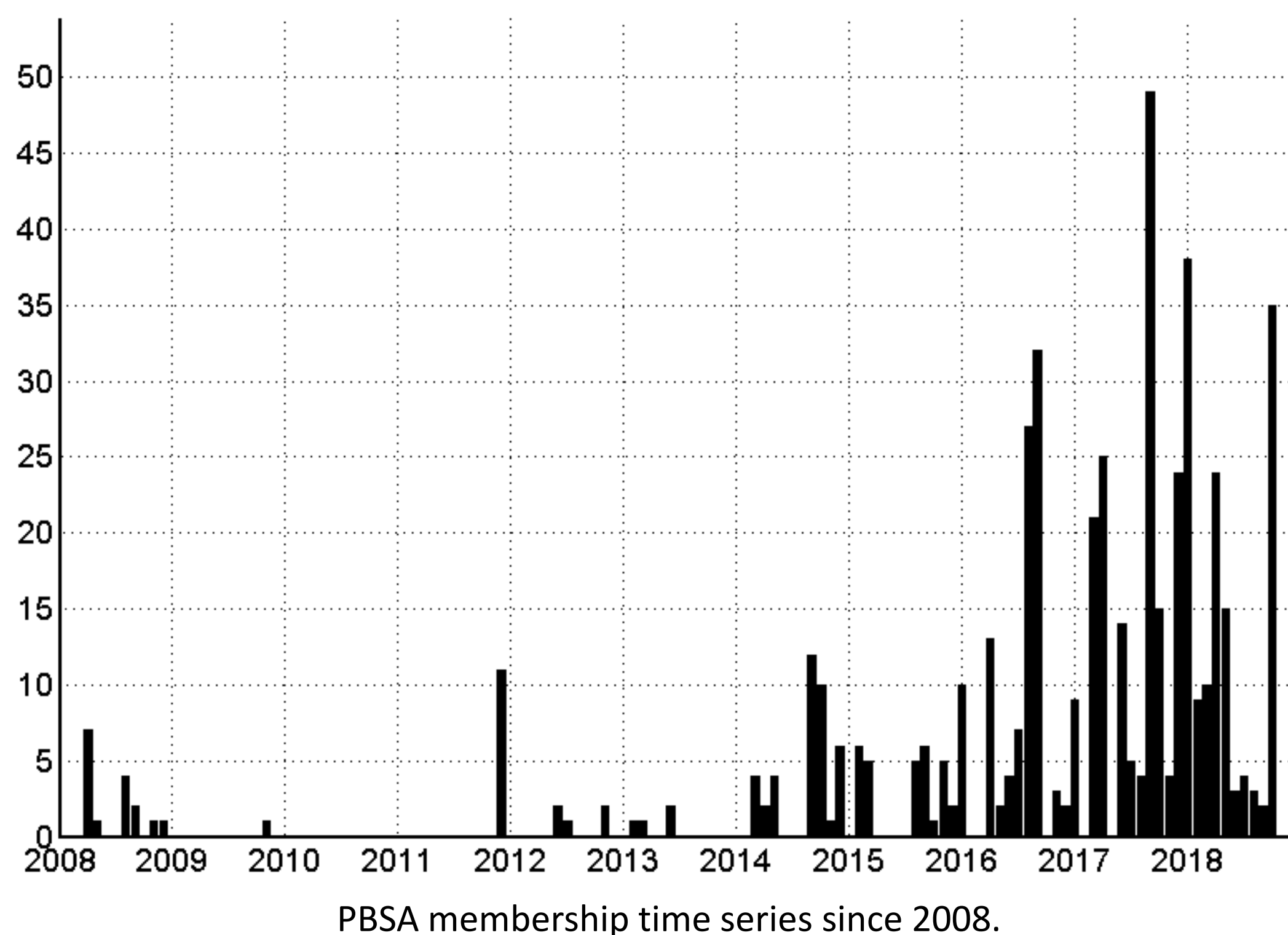
Life sciences research is rapidly increasing in institutions across urban and rural Pakistan. The Global Health Security Agenda recommends that laboratories receive expert training in biorisk practices. The Pakistan Biological Safety Association (PBSA) was established in 2008 and has collaborated with the Fogarty International Center (FIC) at the US National Institutes of Health since 2013 to train professionals in biosafety and biosecurity protocols, and the program has continued to grow substantially.

## Methods:

PBSA and FIC have designed biorisk management curricula and implemented regional/national training workshops with external consultants. The program has grown in scope through deliberate outreach in remote and under-resourced areas as well as via use of social media and online resources to boost impact. Outstanding participants are selected to be developed as master trainers. The figure below shows the selection and training process for master trainers.



Framework showing a participant's journey to become a trainer



Outreach Program: PBSA membership heat plot showing the increase in PBSA membership, by location, over time



Proportion of PBSA members in locations around the country

## Results:

PBSA and FIC have conducted training workshops throughout Pakistan, teaching ~800 health professionals from more than 280 institutions and producing 48 master trainers. PBSA lifetime membership has grown by over 50% in the past year alone, particularly in outlying areas. Provincial chapters conduct outreach activities with local master trainers. Curricula have been translated into the national language (Urdu) as well as regional languages, increasing accessibility. PBSA offers a range of workshops including biosafety awareness, IBCs, HROs, ISO preparedness, and biosafety cabinets in addition to the master trainer series. PBSA is now part of the Pakistan National Laboratories Working Group and has over 30 IFBA certified professionals. The organization is working toward sustainable long-term impact.

## Conclusion:

PBSA is a success story that can serve as a model for other countries. The progress PBSA has made in bringing biosafety to remote and under-resourced areas in the country is novel.



A trainer demonstrates proper spill kit use in a laboratory