



# Nadi Filter

An Innovative Safe Drinking Water Solution

April 2025



**ASSOCIATION FOR  
HUMANITARIAN  
DEVELOPMENT**

[WWW.AHDPAK.ORG](http://WWW.AHDPAK.ORG)



# PRESENTATION OUTLINE

- AHD Introduction
- Chronology of Nadi Filter Innovation
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- Nadi Filter Material & Process
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# AHD INTRODUCTION

Association for Humanitarian Development – AHD is a registered non-profit organization in Pakistan.

The organization started its operations in the year 2003.

AHD works with communities for safe drinking water, preventive healthcare, climate resilience, food security and livelihoods, emergency response and sustainable solutions.

AHD Pakistan working to empower rural poor communities to build their skills and give them solution of safe drinking water for lifetime.

AHD Head Office in Hyderabad & Field offices in different provinces of Pakistan and in African Countries. Vision to reach 1 Million families and help 10 million rural poor communities within 2020 to 2030. Join hands to scale it up.



**CHOLERA, GASTRO & DIARRHEA IN PAKISTAN:**  
**ABOUT 80% RURAL AND 60% URBAN COMMUNITIES FACING**  
**UNAVAILABILITY OF SAFE AND CLEAN DRINKING WATER IN**  
**ALL OVER PAKISTAN.**





## **CHOLERA, GASTRO & DIARRHEA IN AFRICA:**

Roughly 1.4 Million People Die Annually From Water And Sanitation-related Illnesses. Children Are The Most Affected, With Diarrhea Caused By Unclean Water Killing 525,000 Children Under Five Every Year, According To UNICEF. That's About One Child Every Minute.

## **REALITY OF DIRTY WATER IN AFRICA**

WHO Geneva says nearly 700,000 cases reported in end of 2024 in 23-African countries & controlled via medicine and vaccination of Cholera, Gastro and Diarrhoea. As per AHD experiences Safe Drinking water can control and eradicate Cholera, Gastro & Diarrhoea.





# CHRONOLOGY OF NADI FILTER INNOVATION

In the year 2005, we learnt in news that 500 children have died of Cholera in Civil Hospital Hyderabad, Sindh, That sadden Mr. Khurshid Bhatti CEO AHD & team & work on to find solution to save children from Cholera, Gastro & Diarrhea.

In 2006, AHD successful & innovated a rough model of NADI Filter. Nadi means clay pitcher in Sindhi language in Jati coastal area.

In 2007 AHD installed 10 Nadi filters on pilot basis & 100 supported by ADP USA & Oxfam also approved project for 100 Nadi Filters research and test conducted 5-to-6-time one filter & results find wonderful solution test results 98% overall, a successful research done in 2008.

Since 2008 AHD team working on Nadi filter and yearly target increases and now Nadi filter introduced all over Pakistan and INGOs, NGOs and UN organization doing Nadi filter to access safe & clean drinking water & what a year 2024 AHD won 02 mega awards and esteemed Nadi filters reached 365,000 families, 3.6 million people drinking safe & clean drinking water.



# HOW NADI FILTER WORKS?

## “Good Microbes”

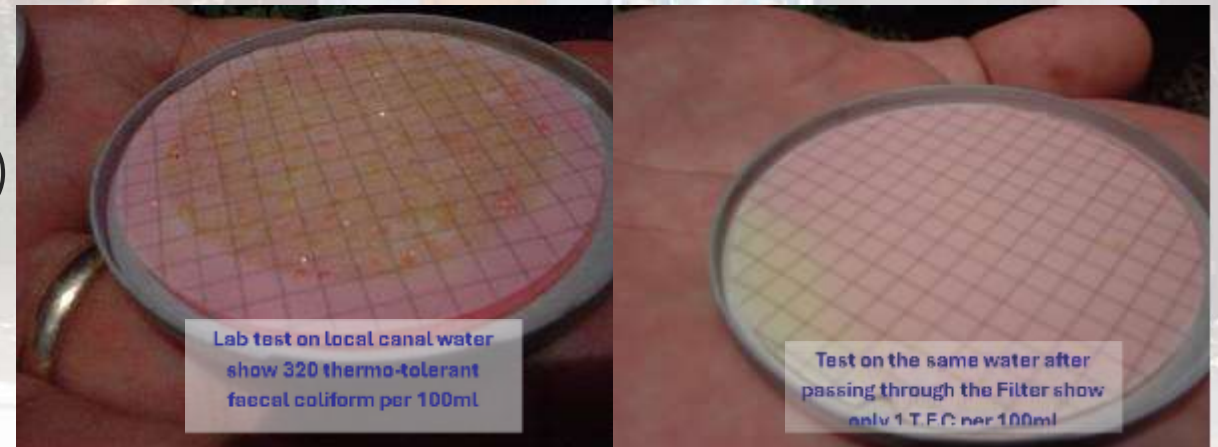
The active biology assembles itself into a series of layers. The uppermost is called the schmutzdecke.

### This Includes:

- Threadlike algae
- Plankton
- Protozoa
- Bacteria

### They Effective remove:

- Parasites Including: a. Giardia b. Cryptosporidium
- Viruses including a. Faecal coliforms b. Cholera c. Typhoid fever d. Amoebic
- Bacteria including a. Iron, b. Sulphur bacteria (slimy deposits)
- Chemicals including a. Iron b. Manganese (rust, stains, metallic tastes)
- Hydrogen Sulphide: (Rotten egg smell & other gases)
- Toxins
- Pesticides
- Herbicides
- heavy metals (leads)
- Silt and sediments
- Algae





# NADI FILTER MATERIAL & PROCESS

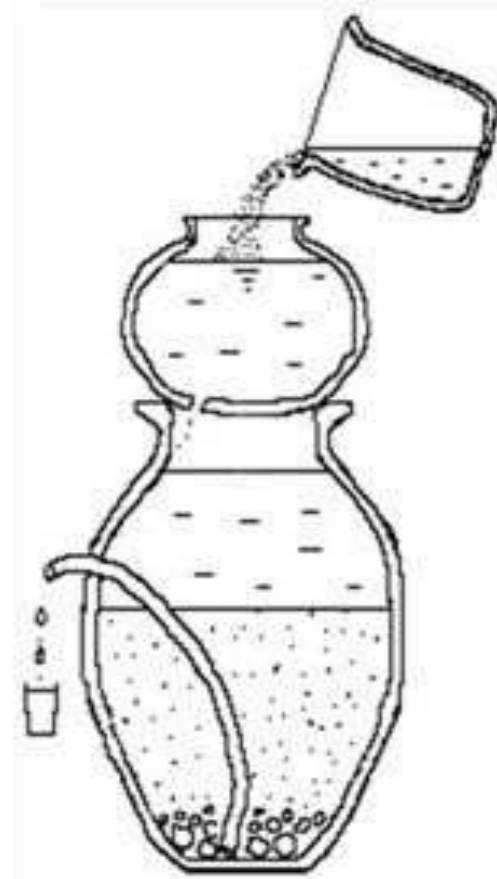
Nadi Filter is made from indigenous material available everywhere in the world. It is made with two clay pitchers - *Nadi* and *Matka* and hill sand.

it requires some supplementary materials – nails, plastic pipe, cement, hammer, rope, and cloth to cover.

The installation requires one time training. Nadi filter installed ONCE sustains for 10 to 20 years; only care and a little maintenance is required for it.

Filtered water from Nadi Filter is effective to prevent Cholera Escherichia Coli (E. coli) Hepatitis A, Typhoid Fever, Giardia, Dysentery, and Salmonella

| <u>Items</u>            | <u>USD</u> |
|-------------------------|------------|
| Nadi Mud Pot 30" to 32" | \$6        |
| Matka                   | \$4        |
| Sand                    | \$2        |
| Pipe                    | \$3        |
| Cement                  | \$2        |
| String                  | \$3        |
| Bricks                  | \$2        |
| Travel/Labor cost etc   | \$6        |
| 2 Nail                  | \$1        |
| White Mulmal Cloth/Rope | \$1        |



**Typical per unit cost = US \$30**



## 07 INTERNATIONAL RECOGNITION

**Nadi Filter - Safe Drinking Water Solution has been accredited and rewarded by:**

- Asia Pacific Forum for Environment and Development - APFED Showcase-2007-2008
- UNEP – SPDI Pakistan 2009
- Energy Globe Awards for Pakistan 2014
- GSK-Save the Children-UK, Healthcare Innovation Award - 2017
- Energy Globe Foundation Austria-International 2019
- 2024 HLEX Innovation Exchange award Geneva 7
- World Health Assembly – UN 2024





# NADI FILTER OUTREACH

AHD has taken efforts to promote Nadi Filter for access to safe & clean drinking water to the people around the world in Asia, Africa & Australia. The Nadi Filters are adopted by vulnerable people, indigenous groups and disadvantaged communities around the world to tackle Pandemic Cholera, Gastro and Diarrhea & to bring sustainable safe drinking water.

| S# | Country    | No. of Nadi Filters | People Benefitting |
|----|------------|---------------------|--------------------|
| 01 | Pakistan   | 355000              | 3.5 million        |
| 02 | Malawi     | 100                 | 980                |
| 03 | Ethiopia   | 150                 | 1,450              |
| 04 | Kenya      | 200                 | 1950               |
| 05 | Mozambique | 2000                | 26000              |
| 06 | Uganda     | 300                 | 3055               |
| 07 | Zimbabwe   | 130                 | 1300               |



# ADOPTABILITY & SCALE UP

AHD with generous support of donors, philanthropists, corporate companies, grant networks, UN agencies has reached to more than 03.5 million people around the world. There is huge gap in provision of safe drinking water to developing world, one person among three people do not have access to safe drinking water.

AHD Nadi filter is easy to adopt everywhere in world. AHD recommends following actions for scalability of Nadi Filters to provide safe drinking water to the developing world:

- Advocacy & Lobbying on safe drinking water
- Showcasing at national & international level
- Allocation of Funds for Nadi filter Water units
- Partnership and Networking
- Communications and Storytelling
- Replication of models in different countries
- Skill training & quipping rural communities with solution to tackle future disasters





# **ECONOMIC, SOCIAL AND ENVIRONMENTAL BENEFITS**

**AHD Nadi filter have a multiple benefits for the poor communities, once install Nadi filter unit at their household level than:**

- ❖ 1 one Nadi filter unit can save 20 to 25 US \$ per month in poor slum areas and for urban slum save US \$ 80 to 100 per month per family
- ❖ Nadi filter saves Freshwater, Rainwater, Tap water and ponds water and helps safe and clean drinking water.
- ❖ Nadi filter helps to save ground water and fill up ground water again
- ❖ Drought mitigation and water conservation
- ❖ 5.9 million tones bottles production across globe yearly & Nadi filter save 100% from bottle and helps natural way of drinking water
- ❖ Energy saving as local material used to prepare Nadi filter unit
- ❖ From 1 Nadi filter unit 08 to 30 people can get safe and clean water and improve in health daily basis.
- ❖ Nadi filter save girls, young women from hoarsening, trafficking



# NADI FILTER IN PICTURES





# NADI FILTER IN PICTURES (WOMEN & CHILDREN FOCUS)





# TESTIMONIALS



We are encouraged by the training and equipping we see happening with the team at AHD. The Nadi filter offers an affordable, locally sourced path to clean water, and we are always happy to refer those in need to it!

Mary Conley Eggert, Co-Executive Director, Global Waterworks



Following AHD victory in winning the Healthcare Innovation Award, the organization is heading towards five African countries, I am pleased to acknowledge AHD as a highly trusted partner.

These efforts highlight the significance of the award in fostering collaboration and promoting sustainable safe drinking water solutions in the region.

Azhar Qureshi Founder/CEO - ECO Conservation Initiative Pakistan



Nadi filters by AHD Pakistan excel in simplicity and affordability, making them a lifeline for communities in rural Pakistan and African countries. Designed with user-friendly, local materials, these filters offer a cost-effective solution, addressing the crucial need for clean water in resource-constrained regions."

Alina Pelka - President & Founder YORGHAS Foundation



# TESTIMONIALS



Investing in Mozambique agricultural value chains gives food and income to 1000s of small-scale farmers. No matter how much we invest and deliver great results it is futile without clean water. That's why I have insisted on getting AHD to Mozambique with their cheap, locally produced and reliant water purification systems. We are ready!

Karsten Gjefle, Senior Advisor -International Development, Norges vel



AHD is an organization totally dedicated to the people of Pakistan. Their leader is completely committed to providing clean water Disaster Assistance and other humanitarian results for his beloved country. I am honored to work with Khurshid and AHD.

David A Dodd Sustainable Resilience Consultant USA



The work of the Association for Humanitarian Development (AHD) is improving the lives of the poor and disadvantaged in Pakistan and Africa. Under the leadership of A. Khurshid Bhatti, Chief Executive and Founder, tools such as the Nadi Water Filter are improving the quality of drinking water for many. I applaud and cheer the work of this organization.

Randy Shaw, PE Retired Manager of the Brackish Groundwater National Desalination Research Facility, USA



# CONTACT US

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# NADI FILTER TRAINING AMOUNG WOMEN & CHILDREN





## PROCESS OF MAKING NADI AND MATKA (PITCHER)





## STOCK AND DISTRIBUTION OF PITCHERS & MATERIAL





**WE HOPE FOR THE BEST**



**THANKS FOR YOUR TIME**