

- ☛ **IS WATER SAFE TO DRINK ?**
- ☛ **IS WATER SAFE FOR AQUATIC LIFE ?**

## Jaf-TARA COULD HELP YOU FIND OUT!

### WHAT IS Jaf-TARA?

Jaf-TARA has a wide range of cost effective, portable, compact and easy to operate **water quality testing kits** developed by Environment Systems Branch of **Development Alternatives**. The kit can be effectively used to perform basic tests to ensure water potability. Jaf-TARA has been designed for concerned citizens, NGOs, students and public authorities to actively participate in monitoring water quality and to protect our scarce fresh water sources from further pollution.

### WHAT CAN Jaf-TARA DO ?

Jaf-TARA can test for essential parameters of drinking and surface water quality. These include simple tests to assess the levels of specific physical, chemical and biological components.

### FEATURES OF Jaf-TARA

#### Accuracy of Testing

- ☐ Tests are based on conventional laboratory methods.
- ☐ The kits provide quantitative test for hardness, chloride, dissolved oxygen and temperature.
- ☐ Semi-quantitative tests using colour comparison charts are used for the remaining parameters.



- ☐ **Physical**  
pH, Temperature, Turbidity, Total Dissolved Solids\*.
- ☐ **Chemical**  
Arsenic, Fluoride, Chloride, Residual Chlorine, Hardness, Iron, Phosphate, Ammonia, Nitrate, Dissolved Oxygen, Alkalinity\*.
- ☐ **Biological**  
Coliform Bacteria, Benthic Diversity

\* Available on request

**Reagents:** These are essentially liquid chemicals, provided in leak-proof plastic and glass bottles, enough to *test 100 samples* (with the exception of coliform test, where one sample can be tested with each bottle).

**Detailed instructions:** A pictorial *user's manual* and *field operational handbook* are included in all the kits, **Training video** is also made available which provides step by step instructions for each test.

**Safety:** Jaf-TARA kits are safe and simple to use, and is popular among school students as well as other organisations for their water monitoring programmes. Only mild acids and safe reagents are used in the kits.

**Other accessories:** Includes beakers, syringes, plastic trays, glass test tubes and gloves.

The Jaf-TARA kit cases are sturdy, elegant and waterproof.



Jaf-TARA for Water Quality Monitoring in Rural Areas

**Different versions of Jaf-TARA are available for specific needs with regard to water quality problems.**

- ☐ **Jaf-TARA Standard Kit** can test for 14 parameters of drinking and surface water quality. The standard kit weighs 8 kgs with dimensions of 16" X 12" X 9".



NGOs using Jaf-TARA for Water Monitoring

- ☐ **Jaf-TARA Drinking Water Quality Testing Kit** can test for 10 parameters of drinking water quality. The kit weighs 8 kgs with dimensions of 16" X 12" X 9".



Students using Jaf-TARA

- ☐ **Jaf-TARA Iron testing kit** for pH and Iron (causes digestive disorders and skin diseases), dimension of the kit is 8.6" x 6" x 7.8", weighing approximately 250 gms.

- ☐ **Jaf-TARA Fluoride testing kit** for pH and Fluoride (reponsible for dental and skeletal fluorosis), this kit weighs approximately 250 gms with dimensions 6" x 6" x 7.8".
- ☐ **Jaf-TARA Nitrate testing kit** for pH and Nitrate (causes Methemoglobinemia, also called blue baby disease), the weight of this kit is about 250 gms with dimensions of 8.6" x 6" x 7.8".



Jaf-TARA Fluoride Testing Kit



Jaf-TARA Nitrate Testing Kit

- ☐ **Jaf-TARA Residual Chlorine testing kit** for pH and Residual Chlorine (excessive chlorine can cause thyroid and liver problems) having a dimension of 6" x 6" x 7.8". It weighs 300 gms.
- ☐ **Jaf-TARA Aquacheck Vials** provides a unique and rapid method for testing the presence of **pathogenic bacteria** responsible for common water-borne diseases such as gastroenteritis, dysentery and diarrhoea.



Jaf-TARA Residual Chlorine Testing Kit



Jaf-TARA Aquacheck Vials

## Jaf-TARA ARSENIC TESTING KIT

Arsenic contamination is a major problem in 20 countries, most affected being Bangladesh followed by India (West Bengal). Even in low concentrations, it is known to pose significant health problems. Long term exposure to Arsenic through drinking water causes cancer of skin, lungs, urinary bladder, kidneys as well as other skin damage such as pigment change and hyperkeratosis. Hence, early detection of Arsenic in water is quite imperative.

Jaf-TARA Arsenic Testing kit is cost effective, portable, compact and easy to operate, field testing kit for detection of Arsenic in water. The kit weighs about 2 kgs with dimensions of 12.5" x 7.08" x 2.86"



Jaf-TARA Arsenic testing Kit

### EXCLUSIVE FEATURES OF ARSENIC TESTING KIT

- ☞ Broad test range (10, 20, 50, 200, 500 ppb)
- ☞ Good reproducibility even at lower concentrations
- ☞ 50 samples can be tested using one set of reagents.
- ☞ Low / No false negative results

### SHELF LIFE OF REAGENTS

The reagents of all versions of Jaf-TARA kits have a shelf life of **6 months**, with the exception of the following :

- ☞ Aquacheck Vial - 2 years
- ☞ Starch reagent - 1 month
- ☞ Reagents of Arsenic Testing Kit - 4 months

Reagents can be replenished and extra equipment can be ordered separately.

## OTHER PRODUCTS & SERVICES



Pawan-TARA Air Testing Kit

**Pawan-TARA** is a portable air monitoring kit which tests respirable particulate matter, sulphur dioxide and oxides of nitrogen in ambient air.



Jaf-TARA Filter

Jaf-TARA Filter is a cost effective community based water purification system for removal of turbidity and Bacterial contamination.

### TARA Environment Monitoring Facility

The environment laboratory provides consultancy to diverse clients like civic agencies, industries, NGOs and communities for research in the field of air, water (including wastewater) and soil quality monitoring, analysis and treatment. Other services include designing of wastewater treatment plants for industries and environmental auditing.



### OUR CLIENTS

Jaf-TARA kits are being used by wide range of organizations, NGOs, educational institutions, hospitals, public authorities and individuals for their water monitoring projects. Some of our regular clients:

- Central Water Commission
- Water and Power Consultants
- Ministry of Water Resources
- UNICEF
- WHO
- U.P. Jal Nigam
- The Swajal Project, U.P. Rural Water Supply and Sanitation Project
- ITC India Limited
- CLEAN-India NGO Partners
- Scientific Institutions

**Availability:** The environment monitoring and management tools are supplied by Technology and Action for Rural Advancement (TARA) on an order basis. TARA provides after sales service as well, such as supplying refill chemicals, extra equipment and training.



Jaf-TARA Standard Kit Case

Technology and Action for Rural Advancement (TARA), is the primary business arm of the Development Alternatives Group. TARA produces and markets technology innovations of Development Alternatives and other organisations. It demonstrates that technology and business innovations can be utilised to establish alternative economic opportunities on a large scale in India. TARA also provides relevant production engineering and market feedback to the designers at Development Alternatives to facilitate continuous adaptation and improvement of technologies.

**For further information contact:**



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# Jaf-TARA

Portable Water Testing Kits



Tools for  
Assessment, Awareness and Action

★ Development Alternatives