

# IEDRO



## INTERNATIONAL DATA RESCUE NEWS

*Saving data, saving lives*

**VOLUME 4 ISSUE 8**

**DECEMBER 2007**

**Niger Delta OIL SANDS**

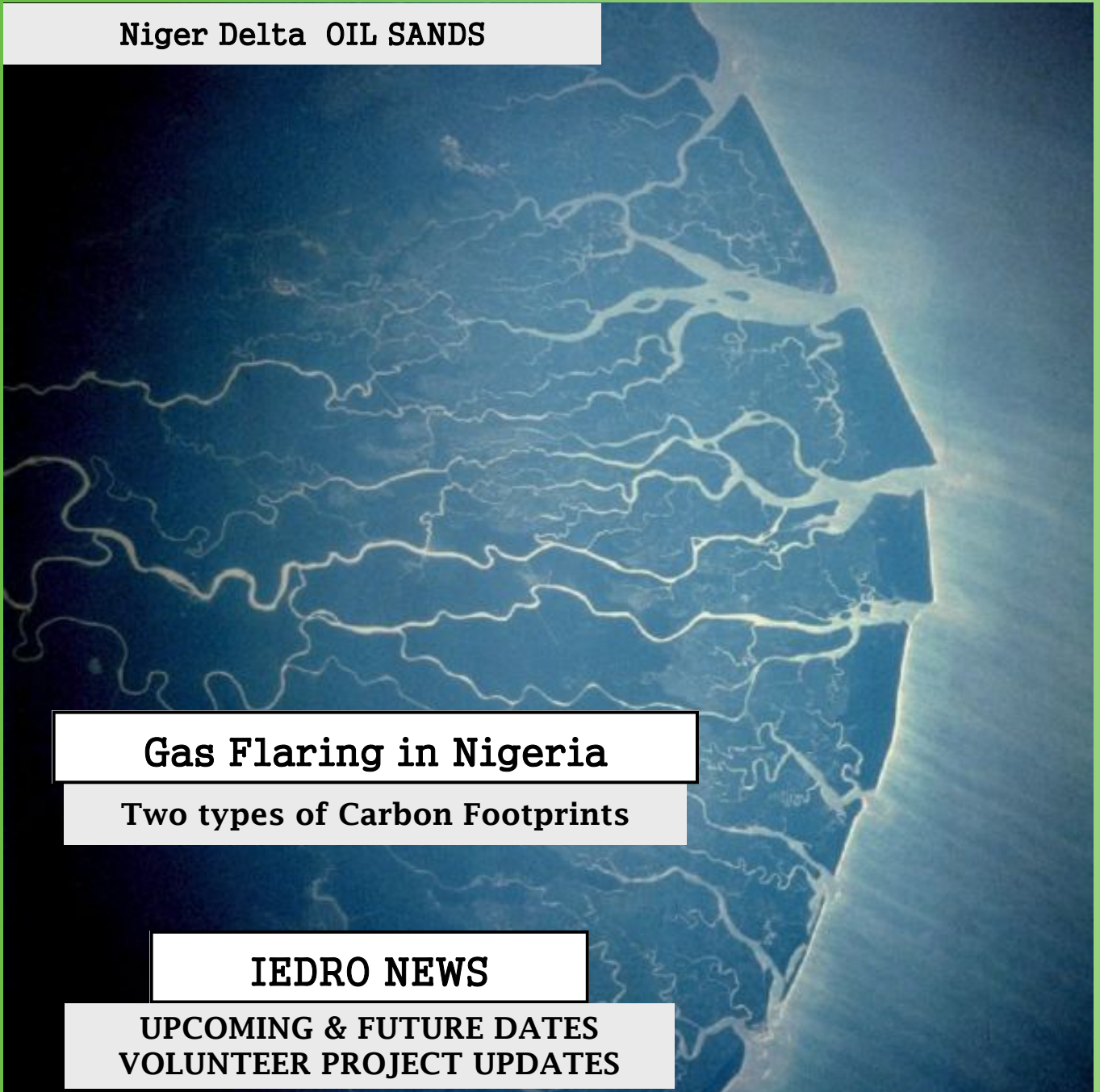
**Gas Flaring in Nigeria**

**Two types of Carbon Footprints**

**IEDRO NEWS**

**UPCOMING & FUTURE DATES  
VOLUNTEER PROJECT UPDATES**

Photograph courtesy of NASA Space Shuttle Overflight



## Gas Flaring in Nigeria

From high above the earth it looks like the lights have been left on. Gas flaring is clearly visible as a reminder that limited valuable natural resources are lost to feed the ever-growing demands of industrialized nations at the expense of the health of others.

**Nigeria** has one of the richest deposits of oil, making it the largest African producer of petroleum and natural gas (June 2005, Climate Justice Programme). Oil revenues account for over 98 per cent of Nigeria's foreign exchange earnings.

**Oil deposits** are found with natural gas deposits, both created by heat and pressure in the earth's crust. When oil is extracted from the earth, as the pressure goes down, gases come to the

surface of the oil. Separating natural gas from oil deposits is a costly practice. For refineries where there is neither the demand nor capacity to collect and process this "by-product", associated gas is burned off (gas flaring). Alternatively in Europe and the United States associated gas is (mostly) either used or re-injected into the ground. Natural gas harvested for use is generally extracted from isolated (non-associated) natural gas deposits.



Being primarily a mixture of methane (over 70%), ethane, and propane (EIA, 2008), during combustion gas flaring releases high levels of greenhouse gases including carbon dioxide. Additional combustion by-products include: nitrogen dioxides, sulphur dioxide,

**approximately 2 million barrels of oil per day are extracted in the Niger Delta**



## What are Carbon Footprints?

**Primary footprint** : the measure of our direct emissions of CO<sub>2</sub> from the burning of fossil fuels including domestic energy consumption and transportation (e.g. car and plane).

**Secondary footprint**: the measure of indirect CO<sub>2</sub> emissions from the whole lifecycle of products we use - those associated with their manufacture and eventual breakdown.

benzene (a carcinogen: osha.gov), toluene, xylene, hydrogen sulfide, benzopyrene and dioxin.

This **toxic release** has a high negative impact on the local environment and population including respiratory illnesses, cancer, and acid rain. Nigeria is the most populous and one of the larger countries in Africa with an estimated population of over 140 million.

**Beyond gas flaring** the challenges of daily life include lack of access to health care, clean water, adequate sanitation and employment. It is estimated that for every citizen that has access to potable water: one fellow country person does not.

Despite the wealth of the oil-rich Niger Delta in southern Nigeria, over 50% of the population live on less than one dollar per day (World Bank) and have an adult life expectancy of only 47 years of age.

**Ironically** Africans currently contribute only about one metric ton of carbon dioxide per person per year, compared to the average (estimated) US carbon footprint of 19.8 tons (Guardian, UK, 2008). Despite this, in their homeland, on their doorstep with little benefit to the average Nigerian the

thirst of oil dependent countries continues to pollute their air, their communities and the global climate in ways that many of us don't wish to see.

Distance allows us to move through our day oblivious to the ill-effects aside from the cost at the fuel pump. In reality the costs are far greater and paid by people for whom a car is as utilitarian as conversational Latin was to me as a teenager.

Kate Jax 2007

"I am a global polluter; polluting the air of children more than 8,000 km away."

# INTERNATIONAL DATA RESCUE NEWS

## RICK'S DATES



Rick will be in attendance:  
January 20-24,  
2008

American  
Meteorological  
Society 2008  
Annual Meeting  
New Orleans  
Convention  
Center

### On the Radar:

American  
Association of  
Geographers  
Annual Meeting  
Boston  
April 15-18

## WORKSHOP UPDATES

Mediterranean Basin Data Rescue Conference .  
November 28–30, 2007 Tarragona, Spain

### Discussion Highlights:

- \* An immediate need for **data rescue and digitization** assistance in Angola after the ending of their 30 year civil war.
- \* Assistance with rescuing and digitizing 5000 ships' logbooks from the 1700's and 1800's covering British ships sailing through the Mediterranean.
- \* Assistance in rescuing and digitizing approximately 10 years of surface weather records from the Ottoman Empire in the late 1800's.
- \* Assistance to all participant countries in the "marketing" the importance and necessity of data

## VOLUNTEER PROJECT NEWS

Judy Emily Soh will assist with IEDRO's booth at the American Meteorological Society Annual Meeting booth in New Orleans in January 2008. With Judy's assistance and the possible assistance of our last year's volunteer Sally Barnhart (Ft. Worth), our focus will be IEDRO promotion, networking and marketing.

Mike Walker has consulted with management ideas and collaborated on rewrites of the volunteermatch.org solicitation for IEDRO volunteers. **Thanks Mike!**  
Through Volunteermatch.org we hope to attract web site support to assist Scott and to secure a few more volunteers to help out at IEDRO Corporate HQ.

## FUTURE WORKSHOPS

### The 2008 Annual Meeting of the Association of American Geographers

Boston April 15-18 2008



- **The Latest Research** Featured panels of distinguished researchers, and over 4,000 papers and presentations.
- **Special Guest Speakers** Including Noam Chomsky and Jeffrey Sachs.
- **Field Trips** exploring the rich cultural and physical geographies of Boston and the New England region.

“Search the Internet and Make a difference”

[www.goodsearch.com](http://www.goodsearch.com)

### STRIP CHART DIGITIZATION PROGRAM PROGRESS REPORT

Ed is working on the presentation for IEDRO to use at the booth at the American Meteorological Society meeting in New Orleans next month (January 2008). Rick and Jean-

Paul will be working over the holidays to get the computer Jean-Paul provided up and running to handle the strip chart digitization software Ed is building.

Strip chart digitization program – progress continues.

Rick had a discussion with two representatives from KNMI – The Dutch Meteorological Service while attending the Mediterranean Basin Data Rescue Conference in Spain last week. The items covered were the distribution of the KNMI software when it is written and the safeguards to be in place preventing others from modifying the software thereby jeopardizing the accuracy of the digitization.

Help IEDRO in the Race to Collect Data before its too late.

Log on [www.IEDRO.org](http://www.IEDRO.org) to donate.

JOIN us and make a difference.

Visit us on the web  
[www.IEDRO.org](http://www.IEDRO.org)

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IDRN Editorial Staff  
Brooke Ngo  
Ruth (Kate) Blackburn

## IEDRO's MISSION

The mission of the International Environmental Data Rescue Organization is to assist the scientific and educational communities of mainly developing countries locate, rescue and digitize all environmental data currently at risk on perishable media, and to make those digitized data freely and openly available to the world scientific and educational communities before it is too late.

### **International Environmental Data Rescue Organization, Ltd.**

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IEDRO is a registered 501(c)(3) organization

email: [admin@iedro.org](mailto:admin@iedro.org)  
website: [www.IEDRO.org](http://www.IEDRO.org)  
Board of Directors Chair: Janet F. Sansone  
Executive Director: Dr. Richard Crouthamel

### **Top 5 Critical Reasons to Rescue Data:**

1. to predict the spread of diseases (malaria, yellow fever, West Nile Virus) so that doctors can reach and protect the children and the elderly before the disease hits.
2. to understand climate change and global warming by comparing past weather conditions with what's happening now.
3. to help keep the Earth's 1.8 Billion subsistence farming families from starvation by showing them the rainfall they can normally expect so that they can grow appropriate crops and save enough to get through the famine years.
4. to show engineers and builders the past extreme weather events so they can build bridges, dams, buildings to withstand these events when they occur again.
5. to show weather forecasters what weather patterns produced tornados, floods, hurricanes so that they can better predict those killers now.