

29TH ANNUAL MEETING OF THE  
INTERNATIONAL ASSOCIATION FOR IMPACT ASSESSMENT  
17-22 MAY 2009  
ACCRA INTERNATIONAL CONFERENCE CENTER  
ACCRA, GHANA

**IAIA**

# IMPACT ASSESSMENT AND HUMAN WELL-BEING

## FINAL PROGRAM

### HOSTED BY

Ministry of Environment, Science and Technology (MEST)  
Environmental Protection Agency (EPA)  
International Association for Impact Assessment-Ghana (IAIA-Ghana)

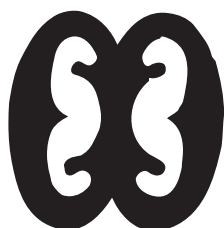
### IAIAO9 PREMIER SPONSOR



### HOST ORGANIZATIONS



IAIAO9  
Accra, Ghana



Adinkra Symbol of Unity  
and Human Relations

**IAIA-GHANA**

# SPECIAL ACTIVITIES AND EVENTS

## Table of Contents

Special Activities & Events.....	2
Welcome.....	4
Conference Theme.....	5
Conference Overview.....	6
Conference Schedule.....	8
Technical Program Overview.....	10
Theme Forums.....	12
Concurrent Sessions.....	18
Posters.....	42
Special Sessions.....	44
Technical Visits & Tours.....	46
Sections.....	48
Exhibitors.....	49
General Information.....	50
IAIA Business.....	52
Committee/Hosts.....	55

## IAIAog At-A-Glance

### SUNDAY, 17 MAY

Training courses.....	All Day
Technical visits.....	All Day

### MONDAY, 18 MAY

Training courses.....	All Day
Technical visits.....	All Day

### TUESDAY, 19 MAY

Plenary, forums, sessions.....	All Day
Poster session.....	Afternoon
Opening reception.....	Evening

### WEDNESDAY, 20 MAY

Forums, sessions, AGM.....	All Day
Social and networking event.....	Evening

### THURSDAY, 21 MAY

Forums, sessions, Council meeting ...	All Day
Banquet.....	Evening

### FRIDAY, 22 MAY

Closing plenary.....	Morning
----------------------	---------

### SATURDAY, 23 MAY

Post-conference tours depart .....	Morning
------------------------------------	---------

### WELCOME RECEPTION

The first evening of IAIAog welcomes attendees with a reception; this event is traditionally a highlight of the conference. Meet old friends, make some new ones, and get your conference off to a great start.

**Tuesday, 19 May • 18:00-19:00**

**AICC Foyer**

**Sponsored by MTN.**

### TRAINING COURSES

IAIAog offers a wide range of exceptional pre-meeting training courses, with several one- or two-day options on 17-18 May.

Note: Registration after 1 April is subject to availability, instructor consent, and receipt of payment.

### POSTER SESSION AND EXHIBITS

Every conference sees an increasingly sophisticated presentation of posters and professional exhibitions. IAIAog will not disappoint. Browse the exhibits at your leisure throughout the conference, and meet the poster presenters at this special session.

**Tuesday, 19 May • 12:30 - 13:30**

**Foyer**

### INDABA

IAIA provides space for impromptu discussions and "pop-up" topics in unanticipated/unscheduled areas of interest, or to carry on a discussion begun during a session.

"Indaba" sessions, from a concept first introduced at IAIA95 in South Africa, will be held at the end of the day on Wednesday and Thursday, with the opportunity to "schedule" your topic throughout the day. The informality and spontaneity guarantee a lively end to each day's sessions.

To participate, write the topic you would like to discuss on the sign-up sheets in the registration area, or add your name to a discussion topic already posted. In the late afternoon, a program committee member will assign rooms to selected topics. Selection is based on popularity of the topic and available rooms.



### BUFFET OF IDEAS

IAIAog introduces a simple methodology for hosting conversation about issues of interest and concern called "Buffet of Ideas."

Buffet of Ideas is an informal networking session which provides participants the opportunity to create their own workshops in small groups over **lunch on Tuesday, 19 May**.

The conversation is to build, link and cross-pollinate ideas and discover new insights into issues important in their work. It is also for participants to share ideas on topics of interest and connect with colleagues with similar interests. The process can evoke the collective intelligence of any group and increase people's capacity for effective action in pursuit of common aims. It also harnesses the power of conversation for work and social value. It provides a useful guide for persons seeking creative ways to foster dialogue in thinking together and creating actionable knowledge.

Participants introduced ideas by e-mailing a suggested two- to three-word title to Jonathan Allotey prior to the conference.

### DINE-OUTS

The tradition of dine-outs is back for IAIAog! Share an evening sampling some of the wonderful food for which Accra is renowned at a "pay your own way" dinner. IAIA-Ghana members have that all-important local knowledge about where the best food and the best dining experiences can be found in Accra, and in the spirit of their country's warm and hospitable traditions, they are ready to take you to experience it!

To join, sign up on the forms posted in the registration area. Dine-outs are a great opportunity to meet new people and see some different parts of the beautiful city of Accra.

**Wednesday, 20 May • 19:30 onward**

**Meet in AICC Foyer**

# SPECIAL ACTIVITIES AND EVENTS

## COMMITTEES AND SECTIONS

Much of the cutting-edge work of IAIA is the direct result of Committee and Section activity, and the only chance for members to meet throughout the year is at the annual conference.

Everyone is welcome to attend a Section meeting. Check the schedule on page 6 for meeting times and plan to attend the Section meeting of your choice.

Committee members are appointed annually. If you are interested in serving on an IAIA Committee, please contact [info@iaia.org](mailto:info@iaia.org).

## ANNUAL GENERAL MEETING (AGM)

This is the annual business meeting of the Association. All conference participants are encouraged to attend. You will meet the IAIA Board of Directors and hear reports from IAIA Committee chairs and the treasurer. The prestigious IAIA Rose-Hulman Award is also presented at the AGM.

**Wednesday, 20 May • 12:40-13:30**  
**Committee Hall 1**

## COUNCIL MEETING

The IAIA Council serves as an advisory resource to the IAIA Board of Directors. The Council is composed of the Board, all Committee chairs, representatives of affiliates and branches, the CEO and Headquarters representatives, Section coordinators, and the conference program chairs for the current-year conference and any future known conferences. However, Council meetings are open; all IAIA members are encouraged to attend.

**Thursday, 21 May, at 12:40**  
**Meeting Room 3**

## AFFILIATES FORUM

A special session is dedicated to the activity of IAIA's Affiliates, Branches and Associated Organizations. Scheduled as a concurrent session, this session is open to all conference participants and replaces the traditional Affiliates Committee meeting.

Representatives from the Ireland-UK Branch, IAIA-Ghana, IAIA-Italia, Associação Portuguesa de Avaliação de Impactes (APAI), Association québécoise pour l'évaluation d'impacts (AQEI), Secrétariat

international francophone pour l'évaluation environnementale (SIFEÉ), and New Zealand Association for Impact Assessment (NZAIA) will make presentations.

Posters are also being displayed by IAIA-Ghana, IAIA-Italy, NZAIA, Portugal, AQEI, SIFEÉ and Mozambique. Stop by during the poster session to visit with representatives of the Affiliates and learn more about their organizations and activities.

**Wednesday, 20 May 9.00 -10.30 am**  
**Room Press Centre 3**

## WELCOME TO IAIA

This session is for any delegate who wants to know more about the organization, its history, and how it works; anyone interested in participating in IAIA as a Committee or Section member; and any new or prospective Board members.

**Tuesday, 19 May • 14:30-16:00**

## TECHNICAL VISITS

See page 44 for the variety of IAIAog technical visit options. Technical visits provide multiple opportunities to participate, network, and enhance your understanding of impact assessment issues in the region.

Registrations are accepted on a first-come, first-served basis until the visits reach the maximum number of participants. Registrations are confirmed in the order that payment is received.

## STUDENT FEE WAIVER PROGRAM

IAIA is pleased to offer a student fee waiver program for IAIAog. This program, initiated at IAIA'04, allows up to ten students a waived conference registration fee in exchange for providing in-kind services on-site in Accra. Selection of students took place in February.

**Student Fee Waiver Program Orientation**  
**Sunday, 17 May • 17:30-18:30**  
**Meeting Room 1**

All students are invited to attend the Students and Early Professionals Section meeting (see page 6 for the Section meeting schedule and locations).

## MENTOR/BUDDY PROGRAM

The mentoring program initiated at IAIA'04 is offered again for IAIAog. The intent is to help students and early professionals (SEPs) feel more comfortable and less overwhelmed with their first IAIA conference experience. The program links the SEP to a Mentor and a Buddy.

The mentor is an experienced IAIA member with the same interest area as the applicant. The Mentor acts as a discussion partner on common topics of interest for the professional development of the SEP. SEPs do not shadow Mentors, but rather meet at the conference to begin conversation that extends beyond the conference.

The Buddy is a current or recent SEP who has attended previous IAIA conferences. The Buddy will help the SEP navigate the conference, answer questions, and introduce the SEP to other delegates. Similarly, the SEP does not shadow the Buddy, but the Buddy acts as a springboard into the IAIA conference experience. Matching of SEPs, Mentors and Buddies took place in April.

If you would like to be a Mentor or Buddy at a future conference, e-mail [bridget@iaia.org](mailto:bridget@iaia.org) or notify the IAIAog registration desk.

**SEP/Mentor/Buddy Orientation**  
**Monday, 18 May • 17:30-18:30**  
**Meeting Room 1**

## AWARDS

IAIA's awards are presented throughout the conference. Who will win the coveted Global Environmental Award this year? And all of the other prestigious honors associated with the annual IAIA awards?

## BANQUET

Join colleagues old and new for good food and good conversation during the conference banquet.

**Thursday, 21 May**  
**19:30 -22:00**  
**The State House Banquet Hall**  
**Across the street from AICC**  
**Pre-registration and payment required.**

**Sponsored in part by Newmont Ghana, AngloGold Ashanti, and Goldfields Ghana.**

# WELCOME



*Ms. Sherry Ayithey*

**Akwaaba!** You are most welcome to Ghana, where the proverbial hospitality and friendliness of the people awaits you. IAIAog will provide you with an excellent opportunity to taste a bit of the Golden Experience of gold, cocoa (golden pod), wildlife, beaches, and the distinct craft-work of a proud and colorful Ghanaian culture.

The environment is our heritage, and we have a challenging duty in utilizing it and at the same time leaving it behind in the pristine state for future generations. This challenge therefore places an onerous responsibility on us as environmental professionals to ensure that the environment is well managed to promote human well-being both now and the future.

The focus on human well-being in this conference is appropriate and most ideal, and it is my expectation that as you evaluate the tools at your disposal, you will keep in mind the contribution of impact assessment to poverty reduction and improved human well-being.

Your collective experience can greatly influence various initiatives aimed at addressing current global environmental challenges of climate change, pollution, diminishing biodiversity and unsustainable consumption and production practices.

We are eager to receive you and ensure you enjoy every bit of your brief stay. You are most welcome.

**Ms. Sherry Ayithey**

Minister for Environment, Science and Technology



*Jonathan Allotey*

**The Local Steering Committee, the Environmental Protection Agency (EPA) and the Ghana Affiliate of IAIA under the auspices of the Ministry of Environment, Science and Technology** are happy and proud to host all participants to IAIAog.

Ghana EPA, being the oldest in Africa, established immediately after the United Nations Conference on the Human Environment in June 1972 in Stockholm, Sweden, has been in the forefront to ensure best practices in environmental management and is happy to share experiences with environmental assessment professionals.

We believe environmental efforts are for the benefit of humanity; thus, to remind all that the focus of the first global conference on the environment was the Human Environment, we have chosen the theme "Impact Assessment and Human Well-Being." This is to draw attention and focus on the need to overcome some challenges faced in the practice of impact assessment for almost four decades and also create awareness that impact assessment is a valuable tool for the benefit of mankind and can help in the quest for sustainable development.

We look forward to receiving all participants for an enriching encounter in addressing this issue and also offer you an opportunity to taste a bit of the golden experience in Ghana.

**Jonathan A. Allotey**

Chair, Steering Committee



*Sachihiko Harashina*

**Welcome to IAIAog!** This year we meet in the center of the globe to exchange information, knowledge and ideas among impact assessment experts from every corner of the world. Not only long-standing IAIA members but also newcomers to IAIA will have an exciting experience. IAIA people are quite friendly, and this warmth should be amplified in this beautiful African environment and cultural traditions.

The main theme of IAIAog is human well-being. Please consider the meaning of this. Is it the same as the concept of human security that the United Nations has defined? Impact assessment must be a major tool to achieve this goal. A defining characteristic of human beings is the use of our brains not only for rational thinking but also for creating peace of mind and human well-being. Sharing the strong desire to enhance human well-being is to create a "Heartware" of sustainability among us.

Have a wonderful week!

**Sachihiko Harashina**

IAIA President



# CONFERENCE THEME



## IMPACT ASSESSMENT AND HUMAN WELL-BEING

The first principle of the Rio Declaration on the Environment and Development states that “Human beings are the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.”

Two decades earlier, the first global conference on the environment was on the human environment. This places human well-being at the heart of development. A number of the Rio Principles relate to impact assessment and human-well being in the development process. References are made to the poor, most environmentally vulnerable, developmental and environmental needs of present and future generations, quality of life, participation of concerned citizens, victims of pollution and environmental damage, and harm to human health. The Declaration calls for action with focus on women, youth, indigenous people and their communities and other local communities, people under oppression, domination and occupation.

Human well-being is defined as the extent to which individuals have the ability to live the kind of lives they may have reason to value as well as the opportunities people have to achieve what they can actually do or be. Human well-being (quality of life) is an important concern in socio-economic development.

The Millennium Ecosystem Assessment (2005) indicates that the constituents of well being include:

- |                                 |   |
|---------------------------------|---|
| • Security                      | • Personal safety   |
|                                 | • Secure resource access  |
|                                 | • Security from disasters   |
| • Basic materials for good life | • Adequate livelihood   |
|                                 | • Sufficient nutritious foods   |
|                                 | • Shelter   |
|                                 | • Access to goods   |
| • Health                        | • Strength  |
|                                 | • Feeling well  |
|                                 | • Access to clean air and water   |
| • Good social relations         | • Social cohesion   |
|                                 | • Mutual respect  |
|                                 | • Ability to help others  |
| • Freedom of choice and action  | • Opportunity to be able to achieve what an individual values doing and being |

A large part of well-being involves aspects which can be easily measured (standard of living, amount of money and access to goods and services). Other aspects are difficult to measure (freedom, happiness, art, environmental health and innovation).

The environment contributes to human well-being in a number of ways: provision of food, freshwater, fiber and energy. In addition, the environment provides services such as purification of air and water, protection from disasters and provision of medicines.

The protection of the natural assets provided by the environment requires the coordinated efforts of governments, businesses and international institutions, through policy choices on investment, trade, subsidy, taxation and regulation.

Impact assessment professionals through their work can help promote human well-being by helping in conservation and sustainable use of ecosystems. Impact assessment is not just about management tools but involves people and their aspirations.

The conference will highlight the linkage between impact assessment and human well-being, and impact assessment professionals through the various programmes are expected to build and improve on the knowledge base of the links between ecosystem services and human well-being and develop tools for mainstreaming ecosystems services into development and economic decision making.

# CONFERENCE OVERVIEW

CONFERENCE OVERVIEW									
	Pre-conference Saturday 16 May	Pre-Conference Sunday 17 May		Pre-Conference Monday 18 May		Conference Day 1 Tuesday 19 May			
07:30		Registration for training courses and technical visits		Registration					
08:00							IAPA Ed Board meeting	Registration opens	
08:30									
09:00			Training courses		Technical visits	Training courses	Technical visits	Opening plenary	Exhibits & posters
09:30			A Wetlands/ Castles Depart 07:00		A Wetlands/ Castles (continued)				
10:00	CLEAA (1)		B Volta/ Akosombo 08:00-17:00		D Old Accra 09:00-16:00	Break			
10:30						Theme forums			
11:00				C Aburi Botanic Garden 08:00-17:00		E/F Tema Industrial Visit 9:00-17:00	Poster session		
11:30							Lunch Buffet of Ideas		
12:00		Registration for training courses and technical visits		Registration		Exhibit & poster setup			
12:30								Concurrent sessions	
13:00								Break	
13:30								Concurrent sessions	
14:00			CLEAA (2)						
14:30									
15:00	Registration for training courses and technical visits								
15:30									
16:00									
16:30									
17:00									
17:30			Student Fee Waiver Program orientation		Mentor/Buddy Program orientation				
18:00							Welcome Reception		
18:30									
19:00									
19:30									

# CONFERENCE OVERVIEW

Conference Day 2 Wednesday 20 May		Conference Day 3 Thursday 21 May		Conference Day 4 Friday 22 May		Post-Conference Saturday 23 May					
								07:30			
								08:00			
Registration opens		Registration opens		Registration opens		Post-conference technical visits depart		08:30			
Theme forums		Exhibits & posters	Theme forums		Exhibits & posters	Closing plenary and presentation of awards		Exhibit & poster teardown	G Mining & Environment Depart 06:00		09:00
Break			Break						H Northern Sector Depart 05:00		09:30
Concurrent sessions			Concurrent sessions								10:00
AGM and Rose-Hulman Award Presentation			Council								10:30
Lunch			Lunch								11:00
Concurrent sessions			Concurrent sessions								11:30
											12:00
											12:30
											13:00
											13:30
											14:00
											14:30
											15:00
											15:30
Break			Break								16:00
Concurrent sessions			Concurrent sessions								16:30
											17:00
											17:30
Section meetings		Indaba		Committee meetings		Indaba		18:00			
								18:30			
								19:00			
Dine Outs		Banquet						19:30			

# CONFERENCE SCHEDULE

## Saturday, 16 May

10:00-13:00	CLEAA Meeting 1 (219)
14:00-17:00	CLEAA Meeting 2 (219)
15:00-17:00	Registration (AICC Foyer)
	Training course and technical visit participants only

## Sunday, 17 May

07:30-10:00	Registration (AICC Foyer)
	Training course and technical visit A (Wetlands/Castles), B (Volta/Askosombo), and C (Aburi Botanic Garden) participants
09:00-17:00	Training Courses
	<i>Room numbers will be provided at check-in.</i>
	1. Practical Guide to Effective IA Follow-up
	2. SEA in Developing Country Context
	3. Re-Tooling Impact Assessment for Biodiversity
	4. Cumulative Effects and Follow-Up in IA
	5. Achieving Human Well-Being through SIA
	6. Planning for Effective Public Participation
	7. Understanding Impact Assessment
Depart 07:00	Technical Visit A: Wetlands/Castles
08:00-17:00	Technical Visit B: Volta/Akosombo
08:00-17:00	Technical Visit C: Aburi Botanic Garden
17:30-18:30	Student Fee Waiver Program Orientation (Meeting Room 1)

## Monday, 18 May

08:00-18:00	Registration (AICC Foyer)
09:00-17:00	Training Courses
	<i>Room numbers will be provided at check-in.</i>
	2. SEA in Developing Country Context
	3. Re-Tooling Impact Assessment for Biodiversity
	4. Cumulative Effects and Follow-Up in IA
	5. Achieving Human Well-Being through SIA
	6. Planning for Effective Public Participation
	7. Understanding Impact Assessment
	8. Cultural Component of EIA
	9. Practical Guide to Sustainability Assessment
09:00-16:00	Technical Visit D: Old Accra
09:00-17:00	Technical Visit E/F: Tema Industrial Visit
12:00-17:30	Exhibit and Poster Setup
17:30-18:30	Mentor/Buddy Program Orientation (Meeting Room 1)

## Tuesday, 19 May

08:00-08:50	IAPA Editorial Board Meeting (219)
08:00-16:30	Registration (AICC Foyer)
09:00-10:30	Opening Plenary (Main Hall)
	<i>Chair: Jonathan Allotey, IAIAog Steering Committee Chair</i>
	• <b>Introductory Statement by Conference Chair.</b> J. A. Allotey
	• <b>Statement by IAIA President.</b> Sachihiko Harashina
	• <b>Cultural Performance</b>
	• <b>"Securing the Future through Cooperation: African Spirituality in Human Well-Being."</b> Nana Kobina Nketsia V, Omanhen of Essikado (British Sekondi) Traditional Area
	• <b>Opening Statement.</b> Honourable Sherry Ayittey, Minister for Environment, Science and Technology, Ghana
	• <b>Cultural Performance</b>
	• <b>Closing</b>
	<i>Sponsored by Newmont Ghana</i>
10:30-11:00	Break (Foyer)
11:00-12:30	Theme Forums
11:00-13:00	CLEAA Meeting 3 (219)
12:30-13:30	Poster Session (Foyer)
13:30-14:30	Lunch (Foyer)
14:30-16:00	Concurrent Sessions
14:30-17:00	CLEAA Meeting 4 (219)
16:00-16:30	Break (Foyer)
16:30-18:00	Concurrent Sessions
18:00-19:00	Welcome Reception (AICC Foyer)



# CONFERENCE SCHEDULE

## Wednesday, 20 May

- 08:30-16:30** Registration (AICC Foyer)
- 09:00-10:30** Theme Forums
- 10:30-11:00** Break (Foyer)
- 11:00-12:30** Concurrent Sessions
- 12:40-13:30** **Annual General Meeting and Rose-Hulman Award Presentation** (Committee Hall 1)  
The AGM is the annual business meeting of the Association. All members are encouraged to attend.
- 13:30-14:30** Lunch (Foyer)
- 14:30-16:00** Concurrent Sessions
- 16:00-16:30** Break (Foyer)
- 16:30-18:00** Concurrent Sessions
- 18:10-19:00** Indaba (See flip charts in foyer for information)
- 18:10-19:00** **Section Meetings**
- Agriculture, Forestry & Fisheries (Meeting Room 1)
  - Biodiversity & Ecology (Meeting Room 3)
  - Corporate Stewardship & Risk Management (Press Centre 1)
  - Disasters & Conflicts (Press Centre 2)
  - Environmental Law, Policies & Practice (Press Centre 3)
  - Health (Press Centre 4)
  - IA of Trade-Related Policies (116)
  - Public Participation (217)
  - Social Impact Assessment (215)
  - Strategic Environmental Assessment (117a)
  - Students and Early Professionals (218)
- 18:10-19:00** **Committee Meeting**
- Awards (220)
- 19:30 onward** Dine-Outs (meet in AICC Foyer)

## Thursday, 21 May

- 08:30-16:30** Registration (AICC Foyer)
- 09:00-10:30** Theme Forums
- 10:30-11:00** Break (Foyer)
- 11:00-12:30** Concurrent Sessions
- 12:40-13:30** **Council Meeting** (Meeting Room 3)  
The Council is an advisory resource for the Board. Committee chairs, Section coordinators, Affiliate and Branch representatives and conference program chairs for current and future conferences comprise the Council. All members are encouraged to attend.
- 13:30-14:30** Lunch (Foyer)
- 14:30-16:00** Concurrent Sessions
- 16:00-16:30** Break (Foyer)
- 16:30-18:00** Concurrent Sessions
- 18:10-19:00** Indaba (See flip charts in foyer for information)
- 18:10-19:00** **Committee Meetings**
- Sections Coordinating (220)
  - Publications (215)
  - Training & Professional Development (217)
- 19:30 onward** **Conference Banquet**  
(The State House Banquet Hall)



## Friday, 22 May

- 08:30-11:00** Registration (AICC Foyer)
- 09:00-11:00** Exhibit and poster takedown
- 09:00-11:00** **Closing Plenary and Presentation of Awards** (Committee Hall 2)  
*Chair: Jonathan Allotey, IAIA09 Steering Committee Chair*
- **Introductory Statement by Conference Chair.** J.A. Allotey
  - **Closing Statement.** Daouda Toure, UN Resident/Coordinator/Resident Representative
  - **Presentation of Awards.** Anne Miller, 2009 IAIA Awards Committee
  - **Cultural Performance**
  - **Presidential Address.** Nick Taylor, Incoming President of IAIA
  - **Invitation to IAIA10.** Hussein Abaza, IAIA10 Program Chair
  - **Closing of IAIA09**

*Sponsored by Newmont Ghana and Diamond Cement*

- 13:30-15:30** **Oil for Development Special Meeting**  
(Ghana College of Physicians & Surgeons.  
Address: 54 Independence Avenue, Ridge, Accra (near Ridge Circle) )

## Saturday, 23 May

- Depart 06:00** **Technical Visit G: Mining & Environment**
- Depart 05:00\*** **Technical Visit H: Northern Sector**  
(\*Check the message board and/or the registration desk to confirm departure time.)

# TECHNICAL PROGRAM OVERVIEW

	Main Hall	Committee Hall 1	Committee Hall 2	Press Centre 1
<b>TUESDAY</b>				
09:00-10:30	Opening Plenary			
11:00-12:30	TF1.1 Safeguarding Community Well-Being and Health	TF1.2 Oil and Gas Development: The Role of Impact Assessment	TF1.3 OECD-DAC Forum on SEA in Practice in Development Cooperation	TF 1.4 Positive Impact of Telecommunication on Human Well-Being and Sustainable Development
14:30-16:00	CS1.1 Environmental and Social Assessment in China	CS1.2 Oil for Development (1)	CS1.3 Beyond Reliance on SEA	CS1.4 State of the Art of Sustainability Planning & Assessment (1)
16:30-18:00	CS2.1 Evolving Involuntary Resettlement Practices in China	CS2.2 Issues and Success Stories: EA in Ag, Forestry & Fisheries/Biodiversity (1)	CS2.3 Successes & Challenges of SEA & Follow-up	CS2.4 State of the Art of Sustainability Planning & Assessment (2)
<b>WEDNESDAY</b>				
09:00-10:30		TF2.1 Poverty & Impact Assessment (1)	TF2.2 HIA in Development Projects	TF2.3 Mapping EIA Tools
11:00-12:30		CS3.1 Issues and Success Stories: EA in Ag, Forestry & Fisheries/Biodiversity (2)	CS3.2 Improving the Effectiveness of SEA Capacity Development in Developing Countries	CS3.3 Offsetting Impacts on Biodiversity
12:40-13:30		AGM		
14:30-16:00		CS4.1 Corporate Social Responsibility	CS4.2 Public Participation & Land Use Planning in African Countries	CS4.3 Mainstreaming Biodiversity
16:30-18:00		CS5.1 Corporate Stewardship & Risk Management: International Best Practice	CS5.2 Environmental Policy & Human Well-Being (2)	CS5.3 Social License to Operate & Participatory Processes
<b>THURSDAY</b>				
09:00-10:30		TF3.1 Sustainable Development through Mining in Africa	TF3.2 Low Energy Solutions in for South and North	TF3.3 Poverty & Impact Assessment (2)
11:00-12:30		CS6.1 IA & Public Participation in African Communities	CS6.2 Oil for Development (2)	
12:40-13:30				
14:30-16:00		CS7.1 Impact of ICT on Public Participation	CS7.2 People, Plants & Pangolins	CS7.3 Practice of Public Participation in IA
16:30-18:00		CS8.1 Documenting Good Practice in Biodiversity-Inclusive IA	CS8.2 Participation in IA: Strategies for Improved Practice	CS8.3 IA of Large Projects & Cumulative Impacts (2)
<b>FRIDAY</b>				
09:00-11:00	Closing Plenary			
13:30-15:30	Oil for Development Post-Conference Session <i>Location: Ghana College of Physicians &amp; Surgeons</i>			

# TECHNICAL PROGRAM OVERVIEW

	Press Centre 2	Press Centre 3	Press Centre 4	Meeting Room 1	Meeting Room 3
TF1.5 Supply Chains: The Missing Linkages in Impact Assessment					
CS1.5 Participation in IA: Field Reports	CS1.6 Partnering of Public and Private Partners in Planning	CS1.7 Cultural Heritage Component	CS1.8 Corporate Stewardship & Risk Management Case Studies	CS1.9 Welcome to IAIA	
CS2.5 EIA Follow-Up & Public Participation	CS2.6 Asian SEA, EIA & Sustainability Assessment	CS2.7 Assessing Biodiversity Information	CS2.8 EIA Success Cases	CS2.9 Use of Projects EA/HIA for Road Construction	
TF2.4 Promoting Human Well-Being through Mining in West Africa	Affiliates Forum				
CS3.4 ICT Applications in Impact Assessment	CS3.5 Asian SEA, EIA & Sustainability Assessment	CS3.6 Crisis, Disasters & Environment in Africa (1)	CS3.7 SIA and Sustainable Development	CS3.8 SEA in Central America	
CS4.8 IA's Contribution to Human Well-Being	CS4.4 Asian SEA, EIA & Sustainability Assessment	CS4.5 Crisis, Disasters & Environment in Africa (2)	CS4.6 SEA in China: Practice, Experience, Lessons (1)	CS4.7 Improving Quality of EA Administration in Africa (1)	
CS5.4 Ensuring Development Provides Net Benefit to Society	CS5.5 Size Matters: Challenge of IA for Mega Projects	CS5.6 Contention, Protest, & Participation in EA	CS5.7 SEA in China: Practice, Experience, Lessons (2)	CS5.8 Improving the Quality of EA Administration in Africa (2)	
TF3.4 New Movement of Environmental & Social Consideration					
CS6.3 Progress of SEA (1)	CS6.4 Environmental Policy & Human Well-Being (2)	CS6.5 Climate Change and IA (1)	CS6.6 Practical Issues in HIA	CS6.7 IA of Large Projects & Cumulative Effects (1)	
					Council
	CS7.4 Valuation of Ecosystem Services	CS7.5 Climate Change and IA (2)	CS7.6 Revising the International Principles & Developing Guidelines for SIA	CS7.7 Progress of SEA (2)	
CS8.4 Progress of SEA (3)			CS8.5 AFF: Pulling It All Together	CS8.6 Oil for Development Workshop	

# THEME FORUMS

## Theme Forum Session 1 | Tuesday, 19 May | 11:00-12:30

### TF1.1 Safeguarding Community Well-Being and Health

#### MAIN HALL

*Topic Stream: HIA*

*Convenor: Martin Birley, BirleyHIA*

This theme forum explores the use of health impact assessment as a tool for safeguarding community well-being. The diverse presentations explore the theme from the perspectives of the community and the private sector.

Three of the papers in this session explore the theme of health impact assessment from a community perspective using examples from Canada, Wales and Nigeria. The 4th paper examines the theme from the perspective of the Corporate Social Responsibility agenda of the extractive industry.

Format: Presentation of papers followed by a general audience discussion.

#### Community-Driven Health Impact Assessment

*Colleen Cameron, Coady International Institute and Clinical Associate in the School of Nursing, St. Francis Xavier University*

The People Assessing Their Health (PATH) process is a community-driven approach to HIA that enables community members to develop and use their own Community Health Impact Assessment Tool (CHIAT).

#### An HIA of a Local Development Plan in Wales

*Liz Green, Welsh Health Impact Assessment Support Unit*

Undertaking the HIA of the preferred strategy of the local development plan has “added value” to the plan, the process, and the policy and supported stakeholder participation in planning developments.

#### “It Takes a Village”: The Kigutu Story

*C. P. (Charlie) Wolf, Social Impact Assessment Center*

The Kigutu story is a “natural experiment” in community health impact assessment, both as humanitarian intervention and as community development that can produce lasting social change in a conflict region.

#### HIA and Extractive Industry: Relevant for CSR Agenda

*Francesca Viliani, International SOS*

CSR principles can help practitioners involved in HIA of extractive industry projects in selecting and empowering community by involving them in shaping the impact assessment process.

### TF1.2 Oil and Gas Development: The Role of Impact Assessment

#### COMMITTEE HALL 1

*Topic Stream: Oil and Gas*

*Convenor: Terje Lind, Ministry of Environment, Norway*

There is a strong linkage between oil and gas development and environmental and social quality, and thus human well-being. All sources of energy are causing adverse impacts to the environment in one way or another. Impact assessments of oil and gas development projects are therefore essential for finding ways to mitigate adverse impacts and enhancing the beneficial ones. Governments and the public are increasingly focusing attention on the need for improved governance and more transparent management policies in the sector, and this theme forum will discuss some of these issues.

Format: Presentation of papers followed by a panel of the speakers answering questions and concerns from the audience.

#### The Norwegian Oil for Development Program (OfD): Its Vision, Purpose and Present Status

*Solveig Andresen, Norwegian Oil for Development Program*

The OfD program was launched in 2005 and aims to help developing nations better manage their oil and gas resources. This presentation will introduce the program and inform about results and status of the program so far.

#### Oil and Gas Exploration in Ghana

*Victor Kofi Sunu-Attah, Ghana National Petroleum Corporation*

Ghana began oil and gas exploration fairly recently, and authorities have been very concerned about managing the resources right, financially, socially and environmentally. This presentation will discuss the Ghanaian approach with special reference to the development of the Jubilee Oil field and the use of strategic environmental assessment in that context.

#### Integration of Social Impact Assessments and Environmental Impact Assessments in the Oil and Gas Industry

*Arne Tesli, Norwegian Institute for Urban and Regional Research (NIBR)*

All too often the social and the environmental impact assessments are done as two separate documents in oil and gas industry projects, independent of each other and at different times in the planning process. The importance and need for integrating the two is the subject of this presentation.

#### Working with Indigenous Peoples as Partners in Petroleum Exploration and Development

*Peter Croal, Canadian International Development Agency (CIDA)*

More and more indigenous communities all over the world are affected by oil and gas exploration and production. The oil industry has often overlooked indigenous peoples' rights. The imposition of massive industrial projects on indigenous land is threatening both physical and social existence of cultures which are often ecologically unique.

#### Questions from the audience

## TF1.3 OECD-DAC Forum on SEA in Practice in Development Cooperation

### COMMITTEE HALL 2

*Convenor: John Hobbs*

This workshop will provide an update on the status of the work of the OECD-DAC Task Team on SEA following the publication, in 2006, of OECD Guidance on SEA. Selected cases of SEAs supported and undertaken by development cooperation agencies and partner countries will be showcased. They will aim to demonstrate good practice and highlight implementation of the guidance and donor harmonization on SEA in support of the Paris Declaration.

Format: Presentation of papers and case studies followed by panel questions and answer session.

### Introduction to Work of DAC SEA Task Force and Case Studies

*John Hobbs*

### Key Findings from Case Study Analysis

*Barry Sadler*

### Case Study: SEA Harmonisation/Environmental Mainstreaming in Ghana

*S. Doolan*

### Case Study: SEA in Namibia

*Peter Tarr, Southern African Institute for Environmental Assessment*

### Panel Questions and Answers

*Facilitator: P. Nelson*

### Review of SEAs in Ghana (to be confirmed)

### Questions on SEA Review

### Informal discussion to continue over lunch

## TF 1.4 Positive Impact of Telecommunication on Human Well-Being and Sustainable Development

### PRESS CENTRE 1

*Topic Stream: ICT and Sustainable Development*

*Convener: Mawuena Dumor, Corporate Services Executive, MTN Ghana*

*Sponsored by: MTN*

MTN Ghana, the leading mobile telecommunications provider in Ghana, recognizes the critical role of sustainable development and continues to champion the telecoms sector in towards environmentally sound strategies for business with initiatives such as co-location with other telecom operators. This forum seeks to stimulate discussions on developing the standards to enforce, measure and monitor the impact of the telecoms industry on the environment as well as find ways of addressing public perceptions and health concerns related to telecom infrastructure and the role of permitting agencies in fostering sustainable development in partnership with mobile telephony operators.

Format: Paper presentations followed by a documentary and mini (10-minute) breakout sessions for discussions and question and answer session. Recommendations and wrap-up to be finalized by the convener.

### Cell Phones, Masts and Radiation and Impact on Human Well-Being: The Facts and Misconceptions

*Emmanuel Amamoo Otchere, Development GEOinformation Services (DEGEOSERV), Accra*

The paper will delve into the precautionary principle, the facts and misconceptions of the impact of masts and radiation and the health debate. It is anticipated that at the end, participants will be better informed of the impact as well as recommendations to better harness the potential of the mobile telecommunications industry.

### Relevance of ICT/Mobile Telephony in Sustainable Development

*Patrick Awuah, Ashesi University, Ghana*

The presentation focuses on the relevance of technology/mobile telecommunication in improving quality of life in rural communities and adding value to society. References will be made to case studies using telecommunications to reduce carbon emissions throughout the economy and reducing the impact of business on the environment.

### Relevance of Efficient Planning and Permitting in the Mobile Telecoms Sector

*Oluwale Jacob Ameyan, Environmental Impact Assessment Department of the Ministry of Environment, Nigeria*

The importance of standards to regulate efficiency in the telecommunication sector. How well developed are the standards and what are the next steps? The cell site co-location, fibre optics, having properly resourced agencies for monitoring, development of standards to enforce, measure and monitor the impact on the environment by the telecoms industry, etc.

## THEME FORUMS

Theme forums bring together special speakers to open IAIA conference discussions; they are integrative in nature and deal with cross-cutting issues relevant to the many specialties of impact assessment.

# THEME FORUMS

Theme Forum Session 1 | Tuesday, 19 May | 11:00-12:30

## TF1.5 Supply Chains: The Missing Linkages in Impact Assessment

ROOM: PRESS CENTRE 2

Topic Stream: Energy

Ana Maria Esteves, Community Insights

The theme forum will deal with the question of how supply chains can potentially contribute to social development and how impact assessment can serve as a tool to optimise the benefits flowing to affected communities through enterprise development. A range of perspectives will be presented, from diverse country contexts. The invited speakers represent leading thinkers and practitioners on this topic representing international development agencies, NGOs, corporates and researchers. The primary learning objective is to encourage impact assessment professionals to consider how the supply of goods and services to major projects and ongoing operations can contribute to social development, addressing poverty and the broader dimensions of sustainability.

Format: Paper presentations followed by a brief critical summation of the issues affecting practice and research in assessing the impacts of supply chains by the Convener.

### Introduction

Ana Maria Esteves

### The Critical Role of Impact Assessment in Local Supply Chain Development: Lessons from the Democratic Republic of Congo

Karen Hayes

Major companies, particularly in extractive and manufacturing industries, are required to carry out EIAs, but these are often not extended to include their local suppliers. A case study on Pact's work with the mining sector in the DRC will be discussed, addressing issues such as economic boom and bust – the impact of project cycle supply demands on a small community, practical elements in building effective local enterprises, helping local business women to access to credit, and lessons learned.

### ALP: Measuring the Impact of Supplier Development

George Brakoh, Newmont Ghana Gold Ltd.

Maria Cecilia Araujo Morales, IFC

This paper provides evidence on how indirect effects of supplier development increase the social assets of rural communities as a result of the formalisation of business practices.

### Leaving a Legacy: Adapting Business Culture

Dino Cangy, Sasol

Sasol intends to maximise local content across all its operations in Mozambique. In replicating an established linkages program, Sasol has identified framework conditions, developed performance indicators, and changed corporate practices.

### Conclusion

Ana Maria Esteves

Brief overview of a project in Australia that involves a collaboration between seven corporates, two government agencies and two universities. The project addresses the challenge: "How can mining, oil and gas companies meet the objectives of contributing to sustainable regions and Indigenous economic development through enterprise facilitation and integration of local SMEs into supply chains?". One of the specific objectives relates to assessing and monitoring the impacts (socio-economic impacts and business value impacts) of local SME development and supply chain activities.

### Open discussion

## TF2.1 Poverty and Impact Assessment: What Can We Do to Achieve MDG? (Part 1)

COMMITTEE HALL 1

Topic Stream

Convenors: Maria Partidario, Instituto Superior Técnico; Linda Ghanimé, United Nations Development Program; Arne Dalfelt, NIBR

Poverty is a growing problem, despite efforts for poverty eradication and improvement of the situation in many parts of the world. The situation in many African countries is quite critical, but the growth of relative poverty in our developed societies and urban conurbations is also a major issue of concern.

Format: Paper presentations by selected speakers followed by group discussion using an Indaba format.

### Keynote talks

Chair: Linda Ghanimé

### Impact Assessment During the Economic Meltdown

Peter Croal, Canadian International Development Agency

The current economic crisis necessitates that impact assessment practitioners prepare impact assessments in a more comprehensive way concerning risk from the perspective of regulators, lenders and private sector.

### The Question of Compensation: The Role of Impact Assessment and Physical Planning, and Centralised and Decentralised Decision Making

Arne Tesli, Norway

### PADEC Environmental and Social Follow-Up, Mali

Jean-Phillippe Waaub, GEIGER, Geography Department, UQAM

The Community Development Support Project (PADEC) is in fact an action program. It is related to the second phase of the Poverty Reduction Strategy in Mali and is funded by the African Development Fund. The first phase done between 2001 and 2005, has led to very encouraging results for local community members. Hundreds of those projects have been and will be implemented under this project and the outcome of the evaluation of EIAs conducted would be presented.

### A Viewpoint on the Poverty Alleviation Challenge

Speaker from Ghana (to be confirmed)

Indaba session to follow (TF3.3, Thursday, 21 May, 09:00).



## Theme Forum Session 2 | Wednesday, 20 May | 09:00-10:30

### TF2.2 Health Impact Assessments in Development Projects

#### COMMITTEE HALL 2

*Topic Stream*

*Convener: Mark Divall, NewFields*

This session will highlight the rapidly growing practice of Health Impact assessments in projects in the developing world. The methodology of HIA will be introduced based on the new International Finance Corporation health impact assessment toolkit. Practical as well as considerations for applying HIA as an integrated and multi-disciplinary study will be discussed.

Format: The chair will introduce the concept of HIA, its relevance and the flow of the theme forum. The session will combine relevant policy and procedural guidelines as well as practical application and tools. The integration of HIA in the EIA and EMP process will be addressed as this is the biggest opportunity to start mainstreaming the practice of HIA. After the introduction there would be the following presentations:

#### **Challenges and Prospects of Health Impact Assessment of Development Projects in Resource-Poor Communities: Evaluation of a Five-Stage Model**

*Stephan Abah, Ambrose Alli University Nigeria*

This paper evaluates the methodological challenges associated with carrying out health impact assessments in resource poor communities and proposes a five stage model based on practical experiences in Nigeria.

#### **Development of a Framework for Health Impact Assessment**

*Geetha Ramesh, WorleyParsons*

Framework of HIA process should be all inclusive. This comprises of several steps including screening, scoping, stakeholder communication and consultation, profiling, risk assessment or appraisal, decision making and mitigative measures. This presentation will consider the framework of applying HIA as an integrated and multi-disciplinary study.

#### **An Innovative Approach for HIA in the Tropics**

*Mirko Winkler, Swiss Tropical Institute / NewFields Switzerland*

We present an HIA approach that is broadly applicable in complex eco-epidemiological settings. Multiple steps, including an innovative risk analysis matrix, generate structured outcomes for informed decision-making.

#### **HIA and Malaria in Industrial Project**

*Francesca Viliani, International SOS*

The paper presents case studies of comprehensive HIAs in malarious areas and various examples of program implementation.

### TF2.3 Mapping EIA: Tools for (Self-)Analysis of EIA Systems

#### PRESS CENTRE 1

*Topic Stream: EIA*

*Conveners: Bobbi Schijf, Netherlands Commission for EIA; Reinoud Post, Netherlands Commission for Environmental Assessment*

EIA strengthening in any country should start from a shared understanding of what blocks EIA effectiveness. This session brings together different approaches to EIA system analysis and discusses their applicability and the results of their application in Africa.

Format: Each of the presenters will briefly present the EIA mapping approach that they have worked with one of the presentations taking the form of an interview between the two presenters. Some limited time for questions will be allotted the presenters will remain as a panel, possibly complemented with others involved. The chairs will then present a series of stimulating statements on the (im)possibilities of EIA country analysis, to be consecutively discussed with the panel and the audience. Session will close with a summary of do's and don't for EIA (self) analysis.

#### **Review the Efficiency and Effectiveness of EIAs**

*Wayne Hector, DEAT, South Africa*

The Department commissioned an independent study on the efficiency and effectiveness of EIAs in South Africa. The findings of this study will be used to develop the strategy.

#### **Assessing EA Effectiveness: CLEAA Perspectives**

*Mark Stoughton, Cadmus Group*

*Abdulrahman Issa, IUCN*

Brief presentation of the methodology developed for an assessment of Mali's EIA system and the recommendations of the CLEAA-ECA African Experts' Workshop, which synthesized participants' EIA system assessment experiences.

#### **Assessing the State of EIA Systems: An African Case**

*Peter Tarr, Southern African Institute for Environmental Assessment (SAIEA)*

New approaches towards reliably assessing the actual performance of EA systems have been used by SAIEA in various African countries so that capacity building efforts can be more focused.

#### **EIA Mapping: Rapid Assessment of EIA Systems**

*Reinoud Post, Netherlands Commission for Environmental Assessment*

*Dieudonne Bitondo, Environmental Assessment in Central Africa (SEACA)*

EIA mapping is a practical tool for participatory assessment of EIA systems. The process is as important as the outcome. It provides a useful basis for monitoring EIA system evolution.

# THEME FORUMS

Theme Forum Session 2 | Wednesday, 20 May | 09:00-10:30

## TF 2.4 Promoting Human Well-Being through Mining in West Africa: The Role of SEA

### PRESS CENTRE 2

*Topic Stream: SEA in the Regional Context*

*Convener: Fernando Loayza, World Bank*

*Sponsored by: World Bank and Golder Associates*

The forum's objective is to discuss how strategic environmental and social assessment contributes to achieve the triple bottom line of economic, social and environmental benefits from mineral sector development, hence enhancing human-well being. The forum will focus on the World Bank-supported policy dialogue, the West Africa Minerals Sector Strategic Assessment (WAMSSA), that covers the Mano River countries of Guinea, Liberia and Sierra Leone.

Format: The session will be organized as a discussion panel comprising two segments:

- (1) Short presentations on the Africa Mineral Sector Governance Project and the preliminary findings of WAMSSA will set the scene for the discussion panel.
- (2) A panel integrated by representatives of governments and regional economic integration organizations will discuss:
  - a. How governments in the Mano River Union and regional integration organizations intend to use the results of WAMSSA?
  - b. The strengths and constraints of strategic environmental and social assessment drawing on the experience of WAMSSA?

### Panelists

**Ibrahima Sory Camara**, *Director, Ministry of Mines, Guinea*

**Walter McCarthy**, *Director for Mines, Ministry of Mines and Energy, Liberia*

**Usman Boie Kamara**, *Acting Director of Mines, Ministry of Mineral Resources, Sierra Leone*

**Simeon Moribah**, *Secretary General, Mano River Union*

**Mensan Lawson-Hechelli**, *Director of Mines and Industry, ECOWAS Commission, Economic Community of West African States*

**Souleymane Zeba**, *Advisor, Regional Integration and NEPAD, ECOWAS Commission*

**Abdoulaye Kone**, *Directeur des Ressources Minérales, du Pétrole, et des Energies Renouvelable, Economic and Monetary Union of West Africa*

### The Africa Mineral Governance Project (AMGP)

*Fernando Loayza, World Bank*

*Peter Kristensen, World Bank*

The Africa Mineral Governance Project is an umbrella regional finance facility for technical assistance to support regional harmonization in line with the Africa Mining Vision 2050 and to EITI++ principles.

### Findings and Preliminary Recommendations of the West Africa Minerals Sector Strategic Assessment

*Rob Hounsborne, Golder Associates Africa*

WAMSSA was launched in 2008 and is expected to be completed by June 2009. It focuses on issues associated with sub-regional mining development in the countries piloting AMGP. By complementing analytical work with participatory processes, WAMSSA identified national and Mano River Union environmental and social priorities, and assessed the existing capacity to address priorities at regional level, and at national and sub-national levels with regional implications. Institutional and policy adjustments required to enabling countries to manage regional environmental and social issues have been prepared and will be discussed in a regional validation workshop.

## TF 3.1 Sustainable Development Through Mining: Is It Possible?

### COMMITTEE HALL 1

*Topic Stream: Sustainable Production and Consumption*

*Moderator: Chris Anderson, Newmont*

*Sponsored by: Newmont Ghana (IAIAog Premier Sponsor)*

Through a series of specific questions posed to a panel of experts from varying relevant backgrounds, we will deal with issues of how development impacts land and people and how this is measured and managed using Ghana and mining as a case study and a set of examples.

Mining needs access to land and usually this means impacting people. Companies are faced with a dual task of mitigating their negative impacts on the environment and communities but also being a positive part of development in rural, low income areas. How do you assess these impacts and how do they feed into the local community economy and, ultimately, the national economy?

The session will bring together speakers with differing perspectives including industry, government, civil society and professional impact assessors in the hope of drawing productive conclusions on matters crucial to Ghana's path to positive growth and sustainable development.

Format: The moderator will pose questions. A lead panelist will respond. Panel discussion will then take place with 2-3 questions from the audience as well.

### Panelists

**Kwame Saarah Mensah**, *Private Consultant and ex Government of Ghana Minister*

**Luc Zandvliet**, *Impact Assessor, Triple R Alliance & Collaborative for Development Action*

**Joyce Aryee**, *CEO, Ghana Chamber of Mines*

**Emmanuel Kuyole**, *Revenue Watch (to be confirmed)*

**Ransford Sekyi**, *Ghana EPA*

## Theme Forum Session 3 | Thursday, 21 May | 09:00-10:30

### TF3.2 Low Energy Solutions for South and North

#### COMMITTEE HALL 2

*Topic Stream: Energy*

*Convenor: Martin Birley, BirleyHIA*

*Sponsored in part by: Volta River Authority*

The objective of the forum is to enable participants to focus on the challenges and opportunities presented by climate change and peak oil in the countries of the South. Participants will have an opportunity to consider the consequences of an energy constrained future for impact assessments. This session will provide an opportunity for participants to discuss the implications of climate change and peak oil for the practice of impact assessment. It will include a review of the issues that will drive down our reliance on fossil fuel and of the opportunities this provides for developing a greener economy.

Format: Two presentations to set the scene for small group discussions which will consider the following questions:

- How and when will climate change and peak oil affect human well-being in developing economies?
- How and when should the impact assessment process be responding to the associated challenge?
- What opportunities does this provide for developing a green economy?

#### Energy Constraint and Impact Assessment

*Martin Birley, BirleyHIA*

Evidence for climate change and peak oil implies an energy constrained future for all. How does this affect the impact assessment process and the opportunities for safeguarding and mitigation?

#### UNEP Green Economy Initiative

*Hussein Abaza, United Nations Environment Programme*

UNEP's Green Economy Initiative advocates clean technologies and renewable energy as a means to create jobs, stimulate economies and promote sustainable objectives.

### TF3.3 Poverty and Impact Assessment: What Can We Do to Achieve MDG 2? (Part 2)

#### PRESS CENTRE 1

*Facilitators: Maria Partidario and Ana Maria Esteves*

Indaba session: How can impact assessment help achieve the MDG1: Eradicate extreme poverty and hunger?

- Welcome and Introduction
- Agenda setting
- Discussion
- Report back and closing

### TF3.4 New Movement of Environmental and Social Consideration in International Cooperation

#### PRESS CENTRE 2

*Conveners: Stephen Lintner, World Bank; Sachihiko Harashina, Tokyo Institute of Technology*

*Sponsored by: JICA*

#### Keynote Speech

##### ODA and Sustainability: A New Movement

*Sachihiko Harashina, Tokyo Institute of Technology*

##### Guidelines of Environmental and Social Consideration at JICA as a Bi-Lateral Organization

*Katsuhiko Okazaki, JICA*

##### Experience of an Emerging Country: China and the Role of EIA

*Zhu Xingxiang, Ministry of Environment Protection, China*

##### Experience of Developing Country: Ghana as an African Case Study

*Jonathan Allotey, Ghana Environment Protection Agency*

##### Comments: The Viewpoint of a Multilateral Organization

*Peter Leonard, World Bank*

#### Discussion Period

#### Closing Remarks

*Stephen Lintner, World Bank*



Fishing boats in James Town

# CONCURRENT SESSIONS

Concurrent Session 1 | Tuesday, 19 May | 14:30-16:00

## CS 1.1 Environmental and Social Assessment in China

### MAIN HALL

*Topic Stream: Regional Perspectives*  
*Chair: Peter Leonard, World Bank*  
*Format: Workshop*

The use of Water Users Agreements (WUA) in combination with Community Driven Development (CDD) can provide a combination of effective approaches that contribute to sustainable regional and local water resources management with equitable social outcomes.

### Environmental Management Plan (EMP) Implementation

*Dong Li, Shijiazhuang Environmental Monitoring Center*  
*Shuitian Liu, Chongwu Sun*

Effective implementation of EMP with proper mitigation management measures provides significant added value to public transport systems in China while providing tangible and effective mechanisms to protect the interests of the public.

### Water Resources Scarcity in the Haihe River

*Yonggen Li, Hebei Water Resources Bureau*  
*Zong-Cheng Lin*

The use of Water Users Agreements (WUA) in combination with Community Driven Development (CDD) can provide a combination of effective approaches that contribute to sustainable regional and local water resources management with equitable social outcomes.

### Monitoring by Interaction: The Liaoning Infrastructure

*Jun Zeng, World Bank Beijing Office*

The author presents how project benefits and outcomes can be enhanced by participatory monitoring, and identify and discusses constraints for greater effectiveness of the tool.

## CS 1.2 Oil for Development (1)

### COMMITTEE HALL 1

*Topic Stream: Oil and Gas*  
*Chair: Solveig Andresen, Oil for Development Program*  
*Format: Short presentations followed by open discussion*

Oil for Development Program member countries present issues, problems and opportunities related to oil and gas developments and impact assessment in their own countries and situations. Speakers identified from the group of people receiving capacity building support from the OfD program to attend IAlAog.

### Uganda

*Onesimus Muhwezi, NEMA*

### Vietnam

*Dinh The Hung, PetroVietnam*

### Ghana

*George Diawuah, EPA*

### Uganda

*Justine Namara, UWA*

## CS1.3 Beyond Reliance on SEA: Mainstreaming Environment in Policy and Plan-Making in Developing Countries

### COMMITTEE HALL 2

*Topic Stream: SEA*  
*Chairs: Lex Brown and Barry Dalal-Clayton*  
*Format: Paper Session followed by structured discussion session*

- Needing to integrate environment and development?
- Concerned that SEA may not be the only appropriate tool?
- Wanting locally relevant paths to environmental integration and engagement of other sectors?
- Vision, practicalities and theory of environmental mainstreaming.

### An Overview of Environmental Mainstreaming

*Lex Brown, Griffith University*  
*Deanna Tomerini*

Environmental mainstreaming guidance for developing countries is reviewed. A framework is introduced for implementation of mainstreaming, focusing on governments' own policy and plan making processes, rather than on new tools.

## SEA in China from an Environmental Policy Perspective

*Olivia Bina, Chinese University of Hong Kong*

I consider the context of application of SEA in China from the perspective of EPI, suggesting strengths and weaknesses—not dissimilar in many ways to the experience of OECD countries.

### Environmental Mainstreaming: Experience and Lessons

*Barry Dalal-Clayton, IIED*  
*Steve Bass, Linda Ghanime*

Environmental mainstreaming—including relevant environmental concerns into development decisions—is an agenda for institutional change. Key contextual issues, drivers, constraints, lessons from experience and challenges will be discussed.

### Structured discussion on environmental mainstreaming

*Barry Dalal-Clayton & Lex Brown*

## CS 1.4 The State of the Art of Sustainability Planning and Assessment (1)

### PRESS CENTRE I

*Topic Stream: State of Art of Sustainability Assessment*  
*Chair: Jenny Pope*  
*Format: Paper Session*

Cutting-edge theory and applications of sustainability planning and assessment are explored based on experience around the world. The emphasis is on moving from theory to practice including application of effective techniques and engagement of stakeholders. Facilitated audience discussion will follow presentation of papers by international leaders in the field.

### Infrastructure Planning and Impact Assessment in the Netherlands

*Bart Stolte, Centre for Transport and Navigation, Rijkswaterstaat, EIA/Transportation Centre*  
*Jos Arts*

EIA, SEA, Follow-up, tiering, sustainable infrastructure planning, environmental regulations, area-oriented approach, effectiveness of impact assessment.

### Framework for a System of Sustainability Appraisal

*Barry Sadler*

A framework approach to designing a system of sustainability appraisal will be proposed, which positions impact assessment as a critically necessary but not sufficient approach.



# CONCURRENT SESSIONS

## Applying Sustainability Principles in Practice

Angus Morrison-Saunders, Murdoch University

Nicole Hodgson

International sustainability criteria are translated into practical statements of guidance for carrying out sustainability assessments of individual proposals.

## CS 1.5 Participation in Impact Assessment: Field Reports

### PRESS CENTRE 2

Topic Stream: Public Participation

Chair: John Devlin

Format: Paper Session

How is public participation actually practiced? This session provides reports from Ghana, Nigeria, Guatemala and England. It is the first of five Public Participation sessions that will reflect on the challenges, opportunities and outcomes of IA practice and invite delegates to reflect on how our participation strategies can be improved.

## Stakeholder Engagement: Overkill or Long-Term Investment

Erika du Plessis, Golder Associates (Ghana) Ltd.

Companies that grasp the importance of developing and sustaining relationships with stakeholders will reap benefits of improved risk management and better outcomes throughout the life of the project.

## Impact Assessment of Extractive Industrial Projects

Edward Bristol-Alagbariya, Centre For Energy (CEPMLP), University Of Dundee

Based on the stakeholder theory, Impact Assessment of extractive industrial projects is capable of facilitating the contribution of these industries to sustainable development in poor and neglected resources-rich communities.

## Tools and Techniques for Public and Stakeholder Consultation for the Use of Renewable Energy Sources in Guatemala

Cristhian Escobar, AGER

The importance of tools and techniques associated with productive public and stakeholder consultation to improve the use of renewable energy sources.

## Public Participation in the Development of the Core Strategy for Tandridge District Council, England

Takashi Shimizutani, Hiroshima

University

Sachihiko Harashina

Besides complete integration of the PP process of SEA into the CS development process, statutory consultees act for rather designing an SEA than commenting on the outcomes from the assessment.

## CS 1.6 Partnering of Public and Private Parties in Planning: The Introduction of a New Member to the IA Family

### PRESS CENTRE 3

Topic Stream: Environmental IA Law, Policies, & Practice

Chairs: Jos Arts and Charlotta Faith-Ell

Format: Workshop

Within land-use and infrastructure planning, new forms of partnerships between public and private parties have been developed during the last decades. Traditional contractual arrangements, where the (government) client specifies the design in detail and the contractor is only responsible for construction, are becoming less common in many countries. Traditional contracts are often replaced by different forms of partnering arrangements, e.g.: Early Contractor Involvement, Design, Build & Maintenance (DBM), Build, Operate & Transfer (BOT), concessions and performance contracts. Ideally, Environmental Impact Assessment should influence public-private projects by providing environmental information during all stages of the planning process. However, these new partnerships forms will influence also EIA practice. They may provide a source of innovation within the IA practice.

## Public Private Partnerships and EIA

Jos Arts, Centre for Transport and Navigation, Rijkswaterstaat, Ministry of Transport, Public Works & Water Management  
Charlotta Faith-Ell

This paper discusses key issues and lessons of private-public partnerships and EIA. Why is this an issue? How can EIA contribute to partnering? What can EIA benefit from partnering?

## Contracting Out in a Swedish Rail Authority

Kristina Lundberg, Royal Institute of Technology

The open-market competition of rail infrastructure has led to a poor monitoring practice with limited usage of monitoring data. Furthermore, project contracts generally only involve compliance and conformance monitoring.

## CS 1.7 The Cultural Heritage Component in Impact Assessment: Best Practice Principles

### PRESS CENTRE 4

Topic Stream: Cultural Heritage and Impact Assessment

Chair: Arlene Fleming and Julio Jesus

Format: Workshop

Has the cultural heritage component of EIA been challenging and mysterious to you? Are you unsure of the standards, methods and experts required? Join this workshop for a discussion issues, methods and best practice principles for integrating culture with the biophysical and social components in EIA and SEA.

## The Ghana Connection

C. P. Wolf, Social Impact Assessment Center

This paper seeks to orient IAIA participants to peoples and places in and around the annual conference venue, and connect host communities and countries to impact history, tourism, and assessment.

## SIA, Territory and Indigenous Peoples in Brazil

Cássio Inglez de Sousa, Independent Consultant  
Isabelle Giannini

Indigenous peoples in Brazil. Land, territory and territoriality cultural, social, economic and political dimensions of territory. Impact of development processes on indigenous lands. Anthropological perspective in SIA processes.

## Raising the Profile of Cultural Heritage

Carys Jones, University of Manchester

Cultural heritage impacts have a low profile in EIA; therefore other more holistic approaches need to be considered including those that address interactions between impacts and re-enforce interdependencies.

# CONCURRENT SESSIONS

Concurrent Session 1 | Tuesday, 19 May | 14:30-16:00

## CS1.8 Corporate Stewardship and Risk Management: Case Studies

### MEETING ROOM 1

*Topic Stream: Corporate Stewardship & Risk Management*

*Chair: Debra Zanewich*

*Format: Paper Session*

*Sponsored by: Kosmos Energy Ghana*

This concurrent session will focus on diverse case studies illustrating examples of corporate disclosure, evaluation of sustainable businesses, and assessment of pollution load from industrial estates. Sharing of experiences related to complying with international best practices will be encouraged.

### Measuring Corporate Sustainability Disclosure

*Risa Morimoto, Toulouse Business School*

This paper analyses how companies are disclosing their sustainability practice at a local level by examining the corporate disclosure of supply chain sustainability performance in sustainability reports using content analysis.

## Sustainable Businesses: A Case Study of Greater Sendai RCE

*Paul Ofei-Manu, Independent Researcher*

The paper evaluates the level of (environmental) sustainability of businesses in Japan using companies within the Greater Sendai Area Regional Center of Expertise for SD as a case study.

### Concept of Assimilative Capacity-Based Standards

*Dilip Ramteke, Neeri, Nagpur*

*Chandrashekhar Moghe, Satish Wate*

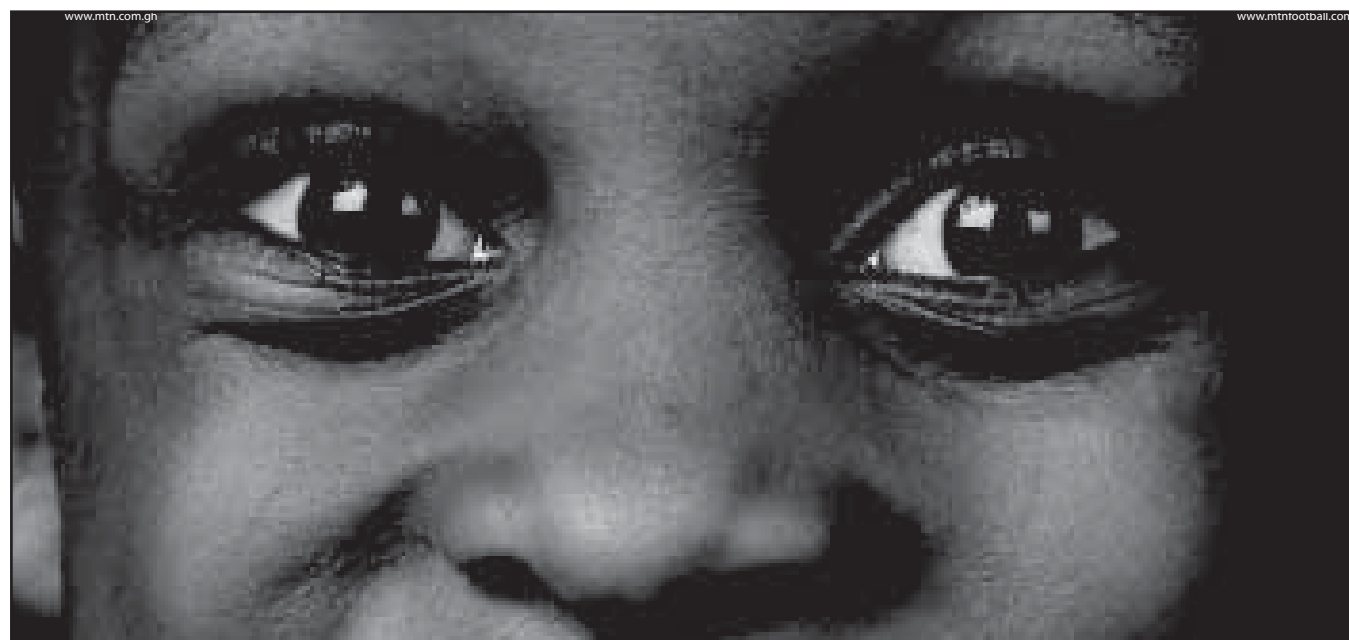
Studies on assessment of pollution load from three industrial estates joining the Gulf of Cambay through natural drain were conducted to develop assimilative capacity-based standards for disposal of wastewaters.

## CS1.9 Welcome to IAIA

### MEETING ROOM 3



*Chair: Rita Hamm, IAIA*

This session is for anyone who wants to know more about the organization, its history, and how it works; anyone interested in participating in IAIA as a Committee or Section member, and any new or prospective Board members.



**We can't wait.**  
**Let's go 2010.**

One pair of 3 billion eyes that will watch nations rise and fall.



OFFICIAL SPONSOR

© 2005 FIFA™



# CONCURRENT SESSIONS

Concurrent Session 2 | Tuesday, 19 May | 16:30-18:00

## CS 2.1 Evolving Involuntary Resettlement Practices in China

### MAIN HALL

*Topic Stream: Regional Perspectives*

*Chair: Peter Leonard*

*Format: Workshop*

### Putting Development First: The Case Studies of Sui

*Qibin Zhang, Sui-Yue Highway Project HQs of Hubei Provincial Communication Department*  
*Enping Luo*

Taking into account the development interests of adversely affected persons by infrastructure transportation projects—putting people first—can be accomplished through the effective application of resettlement policies and practices.

### Using Involuntary Resettlement to Alleviate Poverty

*Zhefu Liu, World Bank Beijing Office*

If designed and implemented properly, involuntary resettlement can be utilized to improve overall living conditions and alleviate poverty of those who are affected.

### Lessons Learned in Involuntary Resettlement

*Daniel Gibson, World Bank Office in Laos*  
*Songling Yao*

Attention to policy and planning needs to be supplemented with effective oversight and accountability mechanisms as well as flexibility.

## CS 2.2 Issues and Success Stories: EA in Agriculture, Forestry, and Fisheries/Biodiversity (1)

### COMMITTEE HALL 1

*Topic Stream: Agriculture, Forestry, and Fisheries/Biodiversity*

*Chair: Asha Rajvanshi*

*Format: Paper Session*

Chronic environmentally damaging AFF practices profoundly affect ecosystems and biodiversity worldwide, probably more than any human endeavour outside of warfare. Experience shows that EIA is uniquely suited to interrogate plans and ongoing activities and to offer effective solutions. Come and share the issues/successes from colleagues' work in eight countries.

### An Analysis of the Causes of Deforestation in Ghana

*Emmanuel Yiridoe, Nova Scotia*

*Agricultural College*

*David Nanang, Emmanuel Yiridoe*

Forest products exported, fuelwood consumption, and food crop production significantly influenced deforestation. Cocoa production indirectly affected deforestation through pressure on trade, and fiscal factors.

### Adaptive Management Planning: Marine Mammal Model Example

*Pamela Gunther, Golder Associates*

This presentation focuses on how EIA practitioners can develop a successful adaptive management program for issues that may be controversial and difficult to predict from a proposed development.

### An Assessment of Forest Resources Policies and Management

*Emmanuel Boon, Human Ecology Department, Vrije Universiteit Brussel, Belgium*

*Albert Ahenkan, Bob Baduon*

Forest resources policies and institutions are critical in achieving sustainable forest management. The paper discusses key policy and institutional mechanisms to develop sustainable forest management approaches in Ghana.

### Human Impact on Habitat of Asiatic Black Bear

*Changwan Seo, University of Seoul*

*Hyuksoo Kwon, Chonghwa Park*

The study of human impacts that spatially affects the habitat selection of Asiatic black bears in the reintroduction program give us good information for the management of those habitats.

## CS 2.3 Successes and Challenges of SEA and Follow-Up in Poverty Reduction Strategies

### COMMITTEE HALL 2

*Topic Stream: SEA and Poverty Reduction Strategies*

*Chairs: Jean-Philippe Waaub*

*Format: Workshop*

Since 2003, most of the Poverty Reduction Strategies (PRS) in African countries were implemented under World Bank initiatives. They envision fulfilling the Millennium Objective Goals by 2015. Some countries were involved in "greening" processes of these PRSs, and have conducted SEA. Environmental and social management plans have been designed and implemented. Follow-up processes have also been conducted. This session presents conceptual frameworks, tool advances, and lessons learned from case studies.

### Greening the Benin Poverty Reduction Strategy

*Jean Hugé, Vrije Universiteit Brussel*

The integration of environmental sustainability in Benin's Poverty Reduction Strategy is discussed and framed as a sustainability assessment exercise, focusing on the "greening" process's secondary impacts.

### Lessons from Independent PRSP Monitoring

*Beassemda Lydie, GRAMPTC*

*Jean-Philippe Waaub, Miangotar Yode,*

*Nathan Naibei*

Learning from civil society independent mechanism of monitoring PRSP. Tools of data collection. First results from database. Perspectives.

### PADEC Environmental and Social Follow-Up, Mali

*Jean-Philippe Waaub, GEIGER,*

*Geography Department, UQAM*

*Modibo Coulibaly, Mahamadou Keita*

Environmental and social system of follow-up indicators. Capacity-building program at local level. Communication strategy for environmental information dissemination.

# CONCURRENT SESSIONS

## Concurrent Session 2 | Tuesday, 19 May 16:30-18:00

### CS 2.4 The State of the Art of Sustainability Planning and Assessment (2)

#### PRESS CENTRE 1

*Topic Stream: State of Art of Sustainability Assessment*

*Chair: Angus Morrison-Saunders*

*Format: Paper Session*

Cutting-edge theory and applications of sustainability planning and assessment are explored based on experience around the world. The emphasis is on moving from theory to practice including application of effective techniques and engagement of stakeholders. Facilitated audience discussion will follow presentation of papers by international leaders in the field.

#### Applying Impact Assessment for Sustainability Assurance

*Barry Sadler*

This framework approach to designing an operational approach to sustainability appraisal will be based on integrating TTL and TBL into impact assessment procedure and methodology.

#### An SDSS for Identifying Sustainable Route Alternatives

*Sukhad Keshkamati, International Institute for Geo-Information Science and Earth Observation (ITC)*

*Mark Zuidgeest, Roel Slootweg*

A GIS-based SDSS for development of sustainable highway route alternatives integrating, with stakeholder involvement, environmental regulations and concerns with equally important considerations like transport efficiency, and socioeconomic demands.

#### A Sustainability Approach to Linear Infrastructure

*Jenny Pope, Integral Sustainability*

A sustainability assessment process has been developed to identify potential routes for power transmission lines in Western Australia. The process, its challenges and the issues it raises will be discussed.

### CS 2.5 EIA Follow-Up and Public Participation

#### PRESS CENTRE 2

*Topic Stream: EIA Follow-Up and Public Participation*

*Chair: Nick Okello*

*Format: Paper Session*

Follow-up is said to be the weakest aspect of EIA worldwide. This session examines the practice and the potential of public participation in EIA follow-up through cases from India, West Africa, Finland and the Middle East. The sessions considers what techniques have been used and their effectiveness.

#### Evaluation of Indian System to Implement Follow-Up

*Ritu Paliwal, TERI University*

*Leena Srivastava*

Environmental Impact Assessment (EIA), follow-up, practice analysis, compliance status, industries, India.

#### Environmental Compliance and Monitoring of Petroleum Development and Pipeline Project

*Ngouana Kengne Cyrille Valence, Centre for Transdisciplinary Studies in Aquaculture, Environment and for Development Support (CTA-AED)*  
*Kuenzop Pedeme Dupleix*

In sub-Saharan Africa EIA follow-up practices are recent. Information on EIA follow-up is scattered and the lessons learned from experience are not well documented and shared amongst stakeholders.

#### Public Involvement in EIA Follow-Up in Finland

*Kimmo Jalava, University of Jyväskylä*  
*Anne-Mari Haakana, Markku Kuitunen*

The paper approaches the follow-up question by examining follow-up practices carried out in Finnish road projects and by outlining the forms of public participation realized in the cases.

#### The Potential for Adaptive Management through Participatory Governance

*Philippe Ker Rault, TU Delft*

Public participation is presented in terms of diversity of objectives, not as a power ladder, and governance style to open the public sphere and to foster adaptative management are compared.

### CS 2.6 Asian SEA, EIA and Sustainability Assessment: SEA System and Practices

#### PRESS CENTRE 3

*Topic Stream: SEA in Regional Context*

*Chair: Kii Hayashi*

*Format: Paper Session*

This session invites experiences, good practices and lessons learned in Asian SEA system and practices. It is a meaningful follow-up of "SEA/EIA development and cases in Asia" held in IAIAo6 and the "Asian SEA, EIA and Sustainability Assessment" sessions at IAIAo7 and o8.

#### SEA Application in the GMS: Improving Environmental Performance and System Efficiencies

*Pavith Ramachandran, GMS Environment Operations Center*

This paper examines how the Core Environment Program, supported by ADB, has utilized SEA in the pursuit of mainstreaming sustainable development within key sectors and economic corridors in the GMS.

#### Comparison of Forest Plan Applied SEA in USA and Japan

*Hideyuki Ito, Nagoya University*  
*Kiichiro Hayashi*

This paper analyzes alternatives in the forestry plans in which applied SEA in the US and the problems of introducing SEA in Japan are clarified.

#### SEA for Sustainable City Planning for Pune, India

*Pawan Labhasetwar, National Environmental Engineering Research Institute (NEERI)*

*Samir Gosavi, Uttam Phand, Helena Lindemark, Satish Wate, Harshada Shinde, Aniruddha Pawaskar*

SEA for sustainability city planning for Pune (SCPP), India identified key issues: critically polluted river, dense slums, traffic congestion and air pollution, hill protection, water loss and untreated sewage.

#### SEA in East and Southeast Asia: A Progress Review

*Jian Xie, World Bank*  
*Jiri Dusik*

This paper will evaluate the latest development of SEA systems, review lessons from fourteen case studies and will present recommendations for further development of SEA in East and Southeast Asia.

## CS 2.7 Accessing Biodiversity Information from Local to Global: Using GBIF

### PRESS CENTRE 4

*Topic Stream: Biodiversity & Ecology*  
*Chair: Nick King*  
*Format: Workshop*

Millions of biodiversity data are recorded annually through IA work, but seldom in formats which makes then accessible and re-usable. Global Biodiversity Information Facility (GBIF) has the expertise and processes for mobilizing all biodiversity information; this project seeks to generate a unique and invaluable resource for IA practitioners across the globe.

## CS 2.8 EIA Success Cases

### MEETING ROOM 1

*Topic Stream: EIA*  
*Chairs: Miguel Coutinho and Júlio Jesus*  
*Format: Paper Session*

What is an EIA success case? How can we collect and use them to promote EIA? The session will include presentations of several EIA success case studies, that could be useful for the professional, as practitioner, administrator or trainer, and a discussion on how to collect and disseminate success cases.

### Environmental Management of Rio Grande Port

*Paulo Roberto Armanini Tagliani, FURG*  
*Monica Wolf, Dione Kitzmann, Milton Lafourcade Asmus*

Impacts of EIS in Rio Grande Port, Brazil. Evaluation of Progress.

### EIA of the Douro Jetties: A Success Case

*Pedro Bettencourt, NEMUS, Lda.*  
*Sónia Alcobia*

In the Douro Coastal engineering project, EIA was a key element in design, mitigation and public acceptance of this complex structure. After completion, residual impacts followed EIS provisions, a success in EIA.

### Gas Well Development in a National Wildlife Area

*Bill Ross, University of Calgary*

Cumulative Effects, species at risk, interference with wildlife conservation, regulatory oversight, environmental assessment panel process.

## Portuguese Environmental Assessment of Resorts

*Catia Sá, EGA (Environmental Governance Advisors)*  
*Jose Guerreiro, Cristina Rebelo*

The paper demonstrates how the EIA process, tourism related, occurs in Portugal through the EIA system and how quality reports provide comparative evaluation, presenting improving opportunities to establish EIA as a sustainable development instrument.

## EIA in Portugal: A Collection of Success Case Studies

*Miguel Coutinho, IDAD - Instituto do Ambiente e Desenvolvimento*  
*Júlio Jesus*

This paper includes a definition of "IA success" and a short description of 9 success case studies from Portugal and an analysis of their common characteristics.

## CS2.9 Use of Projects EA/HIA for Road Construction

### MEETING ROOM 3

*Chair: Juan Quintero*

### Innovative Approaches in Environmental Management

*Juan D. Quintero, The World Bank*

Mainstreaming environment in road design and construction has improved in developing nations. Innovative approaches to address environmental impacts of roads are fostered by strong environmental management capacity in road agencies.

### Environmental Assessment for Roads and Bridges

*Patrick Kamanda, Uganda National Roads Authority*

UNRA takes advantage of the Environment and Social Management Plan as a planning and implementation tool for environmental and social mitigation measures in the Road and Bridge Works projects.

### Experiences of a HIA of a Road Improvement Scheme

*Liz Green, Welsh Health Impact Assessment Support Unit*

Using HIA within the transport planning sector faces many practical issues and challenges including attitudes to the process, evidence and participation. This paper describes and discusses them.

### Notes



# Oil for Development



In September 2005 the Oil for Development initiative (OfD) was launched by the Norwegian government. Since the launch the program has grown rapidly in response to increasing demand from a number of countries for the services of OfD. The budget for 2008 is approximately NOK 245 million (USD 47 million).

OfD represents a thematic broadening of the petroleum sector development assistance that Norway has provided since the early 1980s, which has amounted to approximately NOK 440 million over the whole period 1994 to 2004.

OfD builds on an integrated approach to the petroleum sector that centres on three themes:

- Resource management
- Revenue management
- Environmental management

Good governance, transparency and accountability are important cross-cutting dimensions.

OfD aims at assisting developing countries in their efforts to manage petroleum resources in a way that generates economic growth, promotes the welfare of the population in general and which is environmentally sustainable.

Norway has partly succeeded in translating oil in the ground to development for its people, and sharing these experiences constitutes a key component of Oil for Development. Still, what has worked well in Norway will not necessarily work elsewhere, and the policies chosen in a given country will always have to be adapted to the particular challenges this country faces.

The program is aimed at helping to make oil a blessing, not a curse. History has shown that this, unfortunately, has rarely been the case in petroleum producing countries. While natural resources can generate large revenues to foster economic growth and reduce poverty in some countries, others experience that the exploitation of these resources and a subsequent massive influx of money can lead to corruption and squandering of the national wealth, economic stagnation and ultimately increased poverty, political violence and irreparable damage to the environment. This tendency – for large natural resources to decrease rather than increase the level of development in a country – is commonly referred to as “the resource curse”. Studies have shown that good governance is crucial to ensure that the potential wealth from oil, gas and other resources becomes a benefit to the general population, oil companies and a vibrant civil society that can hold the government accountable for its actions.

‘Good Governance’ in particular implies clear divisions of roles, transparent policies, competent and non-corrupt regulatory authorities that can monitor and follow up the Developing countries that wish to take advantage of their natural resources and improve their population’s standard of living thus face a number of challenges. OfD can provide assistance in helping them overcome these challenges.

As per March 2008 OfD cooperates with 25 countries. The cooperation ranges from covering limited assistance in specific thematic areas to broad, long-term institution building. Oil for Development is a demand-driven initiative. A key request from governments worldwide is assistance in developing the institutional capacity of the regulatory authorities that deal with resource management, environmental management and revenue management. OfD is also involved in developing civil society capacity in our cooperating countries through Norwegian and international Non-Governmental Organisations (NGOs).

**More Information**  
[www.norad.no](http://www.norad.no)

# CONCURRENT SESSIONS

## Concurrent Session 3 | Wednesday, 20 May | 11:00-12:30

### CS 3.1 Issues and Success Stories: EA in Agriculture, Forestry, and Fisheries/Biodiversity (2)

#### COMMITTEE HALL 1

*Topic Stream: Agriculture, Forestry, and Fisheries/Biodiversity*  
*Chair: Michael Koech*  
*Format: Paper Session*

Chronic environmentally damaging AFF practices profoundly affect ecosystems and biodiversity worldwide, probably more than any human endeavour outside of warfare. Experience shows that EIA is uniquely suited to interrogate plans and ongoing activities and to offer effective solutions. Come and share the issues/successes from colleagues' work in eight countries.

#### Impact of Poverty and Changing Cropping Systems on Agro-Crop Diversity in the Upper Niger Delta, Nigeria

*Prince Mmom, University of Port Harcourt, Nigeria*

There is a change in farming systems due to poverty in the region, leading to loss in crop diversity and the nutritional values of indigenous crops.

#### Assessing Impacts of Agriculture on Environment

*Michael Koech, Kenyatta University*  
*Gordon Ojwang, Mary Kinoti*

This paper addresses impacts of agricultural activities on biodiversity in Kenya, highlighting aspects of biodiversity that have been impacted, including landcover and threats to food security. It concludes with recommendations.

#### Agrobiodiversity as Adaptive Component to Changes

*Adugna Abdi Woldeamay, Institute of Biodiversity Conservation*

Agricultural biodiversity, the basis for sustainable production and food security, is subject to impacts of climate change. In-situ conservation of indigenous and underutilized species would mitigate such impacts.

#### An Integrated Assessment of the Sugar Industry of Jamaica

*K'adamawe K'nife, Institute of Sustainable Development, The University of the West Indies*  
*Anthony Clayton, Andrew Spencer*

This project applied an integrated assessment approach to examine the impact of policy changes on Jamaica's sugar industry, and the implications for the economy, employment, society, environment and biodiversity.

#### Impact of Traditional Natural Resources Sectors

*Jokotade Folasade Odekunle, Nigerian Environmental Study Team*

Overuse of natural resources and environmental degradation not only reinforce today's poverty, but also put the sustainable livelihoods of future generations in peril. Poor people are vulnerable to degradation.

### CS 3.2 Improving the Effectiveness of SEA Capacity Development in Developing Countries

#### COMMITTEE HALL 2

*Topic Stream: SEA*  
*Chairs: Rob Verheem, Bobbi Schijf, Nick Okello, Sandra Rihm, Easter Chigumira*  
*Format: Panel Discussions*

Despite various capacity building initiatives, SEA is yet to be fully integrated in planning practice in many developing countries. The question is, "how effective have SEA capacity building initiatives been and what challenges abound?" Find out from capacity builders and those whose capacities have been built through a panel discussion.

#### SEA Capacity Development in Namibia

*Alfred Eberhardt, GTZ*  
*Teo Ngitila*

The weak institutional basis of Namibia requires focused and appropriate concepts for SEA and capacity building as well as external support. Networking among different elements of capacity development is essential.

#### An Analysis of the SEA Practice of Japan's ODA

*Kanji Usui, University of Liverpool*

The epoch-making guidelines have generally worked well so far, and the guidelines influence the domestic environmental policy in Japan.

#### Influence Capacity of the Public in SEA

*Easter Chigumira, University of Zimbabwe*  
*Nick Okello*

Studies concerning the capacity of the public to influence SEA are limited worldwide. How well developed is this capacity in Namibia and Kenya? Do they influence or not?

#### EIA/SEA Capacity Development—History and Outlook

*Sandra Rihm, DHV B.V.*  
*Janet Loubser*

How can capacity building initiatives on Environmental Assessment produce better results? Based on capacity development history and our practical experiences, potential improvements to current practices will be provided.

#### Should Africa Adopt Developed-World SEA Models?

*Janet Loubser, SSI Engineers and Environmental Consultants*

Should Africa adopt developed-world SEA models relating to higher-order environmental planning? Aspects relating to their appropriateness/applicability in countries where basic infrastructure is sorely needed will be addressed.

#### Capacity Building for SEA in Water Sector

*Elena Ostrovskaya, UNESCO-IHE*  
*Lindsay Beevers, Wim Douven, Jan Leentvaar*

The paper discusses various types of capacity building needs in SEA application in developing countries and possible solutions with examples from recent capacity building activities at UNESCO-IHE, the Netherlands.

#### The State of SEA Systems and Practices in East Africa

*Cristina Rebelo, EGA - Environmental Governance Advisors*  
*José Guerreiro*

Comparative overview of SEA systems and practices in East Africa is provided from their legal, institutional and procedural perspectives in order to unveil potential implementation pitfalls, obstacles and lessons learned.

# CONCURRENT SESSIONS

## Concurrent Session 3 | Wednesday, 20 May | 11:00-12:30

### CS 3.3 Offsetting Impacts on Biodiversity: Stopping the Loss and Safeguarding Human Well-Being?

#### PRESS CENTRE 1

*Topic Stream: Biodiversity & Ecology*  
*Chairs: Susie Brownlie, Asha Rajvanshi, Kerry ten Kate*  
*Format: Paper Session*

Human wellbeing depends on nature and the goods and services it provides. How best can we compensate for residual negative impacts of development on natural systems? This session explores biodiversity offsets in different contexts and asks if, and on what conditions, they can safeguard biodiversity and ecosystem services for the future.

#### Ecological Compensation for a Hydropower Project

*Vinod Mathur, Wildlife Institute of India, Dehradun, India*  
*Asha Rajvanshi*

The success of offsets to compensate biodiversity related impacts of developments is greatly influenced by the quality of offset areas and the political will to designate these as protected areas.

#### Compensation in EIA: An Ecological View

*Markku Kuitunen, University of Jyväskylä*

Compensation, restoration, ecological impacts, ecology, conservation, ecosystems.

#### Context Informs Compensation: Lessons from Cases

*Susie Brownlie, deVilliers Brownlie Associates*

Case studies involving compensation for biodiversity loss highlight the importance of understanding the socioeconomic, institutional and development context of the project, and the societal values of the affected biodiversity.

### CS 3.4 ICT Applications in Impact Assessment

#### PRESS CENTRE 2

*Topic Stream: ICT & Impact Assessment*  
*Chair: Yaw Amoyaw-Osei*  
*Format: Paper Session*

The session would present various forms of ICT applications and techniques in impact assessment.

#### Risk Analysis Applied to Illegal Dumps

*Chiara Porcu, University of Sassari*  
*Chiara Rosnati*

In this study Relative Risk Analysis Model was applied to evaluate potential contamination by illegal dumping, phenomenon related to an incorrect or negligent implementation of the separated waste collection system.

#### Web-Based Tool to Assure Environmental Integration

*Anja-Christina Beier, Swedish EIA Centre*  
*Linda Engström, Lisa Eriksson*

The implementation of a Web-based tool to facilitate environmental assessments and the fact that environment and climate is integrated in international development programmes improves natural resource equity in the long term perspective.

#### Mushrooming of Telecommunication Towers/Masts

*Ignace Mchallo, National Environment Management Council*  
*Navone Kisaka*

The number of communication towers and masts is increasing. Investors prefer fast-track approvals. There have been serious complaints regarding public participation in these undertakings.

### CS 3.5 Asian SEA, EIA and Sustainability Assessment: Impact Assessment Practices

#### PRESS CENTRE 3

*Topic Stream: Regional Perspectives*  
*Chairs: Jong Ho Lee*  
*Format: Paper Session*

This session invites experiences, good practices and lessons learned in Asian impact assessment system and practices. It is a meaningful follow-up of "SEA/EIA development and cases in Asia" held in IAIAo6 and the "Asian SEA, EIA and Sustainability Assessment" session at IAIAo7.

#### Potential Risk of Habitat Loss for Amphibian by Land Transformation

*Yoshihiro Natuhara, Kyoto University*

There is significant gap between areas of conservation importance and protected land and there is an urgent need to promote biodiversity conservation on farmland in hilly and plain areas.

#### Impact of Floatable Debris on Watershed Management

*Jong-Gwan Jung, Chungnam Development Institute*  
*Seung-Hoon Yoo*

Understanding the generation of the floatable debris, then structuring framework for sharing expenses and collaboration within the stakeholders to solve problems within the watershed systems in Korea.

#### Learning from the Experience of Japanese Dam Projects EIA

*Atsuko Masano, Tokyo Institute of Technology*  
*Sachihiko Harashina*

Reviewing 7 dam projects applying the Japanese EIA Law, several problems were found with making informed decisions where information disclosure system and administrative procedures are not installed adequately.

#### SEA of the National Hydropower Plan in Vietnam

*Måns Nilsson, Stockholm Environment Institute*  
*Bach Tan Sinh, Tran Viet Hoa, Nguyen Thi Lam Giang, John Soussan, Nguyen Ngoc Hung, Lothar Linde, Goran Lifwenborg*

We present an SEA of hydropower in Viet Nam in the context of the Power Development Plan (PDP) VI.



# CONCURRENT SESSIONS

## CS 3.6 Crisis, Disasters and the Environment in Africa (1)

### PRESS CENTRE 4

*Topic Stream: Disasters & Conflicts*  
*Chair: Charles Kelly*  
*Format: Paper Session*

Crisis and disasters have, by definition, significant negative impacts on the environment and humans. These two Conflict and Disaster Section sponsored sessions focus how these negative impacts occur and how assessment efforts, practical approaches and capacity building can reduce human suffering following disasters and other crises.

### Climate Change and Variability and Communities

*Layla Salum, State University of Zanzibar*

Testing local perception on climate change and variability, vulnerability levels of the communities, and the capacity of the communities to adapt and coping against the impact of changes.

### The Nature and Seriousness of Socio-Economic and Environmental Problems in Zanzibar Coastal Villages

*Makame Makame, State University of Zanzibar*

Socio-economic and environmental problems induced by the tourism investment in the area, emerging threats such as climate change and variability, IA performance to the tourism projects.

### Extractive Industry and Environmental Conflict

*Adebanji Adekoya, Shell Nigeria*

The impact of environmental conflict on rural livelihoods in Nigeria's Niger Delta has been diverse and severe, including destruction of livelihood assets, distortion of livelihood strategies and undesirable livelihood outcomes.

## CS 3.7 SIA and Sustainable Development

### MEETING ROOM 1

*Topic Stream: SIA*  
*Chair: Ilse Aucamp*  
*Format: Paper Session*

SIA can be used as a tool to facilitate sustainable development. The session explores how SIA can be utilized in different situations to ensure that the outcomes of proposed development are in line with sustainable development principles. Rural, urban and post-disaster scenarios are presented.

### Niger Delta Development: Sustainability Assessment

*C. P. Wolf, Social Impact Assessment Center*

The purpose is to assess the development situation in Bayelsa State and to advance a community-based approach to sustainability assessment that will effectively serve the interest of regional development.

### SIA of Urban Form to Enhance Social Well-Being

*James Baines, Taylor Baines and Associates*  
*Nick Taylor*

Good practice SIA applied to changes in urban form utilises a social well being framework for sustainable and socially desirable outcomes. Integrated application is at strategic and project levels.

### Socio-Economic Status of Post-Earthquake Rehabilitation

*Dilip Ramteke, NEERI*  
*Mamta Dalvi, Chandrashekhar Moghe, Satish Wate*

An earthquake-hit area, "Kutch," in western Gujarat, India, has been studied to enumerate socio-economic issues and evaluate the socio-economic status of post-rehabilitated populations in the region.

### Challenges to SIA in a South African Context

*Ilse Aucamp, Ptersa*

SIA in developing countries present unique challenges. This paper investigates some challenges and also look at the need for country-specific guidelines.

## CS.3.8 Strategic Environmental Assessment in Central America

### MEETING ROOM 3

*Topic Stream: SEA*  
*Chair: Juan Palerm*  
*Format: Paper Session*

SEA is gaining momentum in Central America. Different approaches are being used. The region is also seeking a common understanding on SEA which will facilitate cooperation. This session will be a forum to present some experiences and discuss the way forward for SEA in the region.

### Turning the (EIA) Process in Central America into a Supporting Tool for Sustainable Development

*Melanie Slattery, International Union for Conservation of Nature (IUCN)*  
*Marta Perez de Madrid, Hubert Mendez*

The EIA processes in Central America are being standardized and improved, they are becoming more agile. Private and public actors are being trained to participate in a more active way.

### A Great Challenge: EAE Initiative for the AACUE

*Marta Perez de Madrid Utrilla, IUCN*  
*Ineke Stainhaver*

EAE for the Association Agreement between the EU and Central America.

### SEA as Part of Local Planning in Honduras

*Juan Palerm, Consultant, GTZ*  
*Wilfredo Rodezno, Carlos Pineda, María Delfina Flores, Marta Perez de Madrid, Melanie Slattery*

Pilot experience of applying SEA as integral element of municipal planning in Honduras, integrating also elements of land use planning and included capacity-building for technical personnel of the municipalities.



# NEWMONT

GHANA



a responsible mining company....

Delivering on our Environmental and Social  
Responsibility Commitments



# CONCURRENT SESSIONS

## Concurrent Session 4 | Wednesday, 20 May | 14:30-16:00

### CS 4.1 Corporate Social Responsibility: Intention and Outcomes

#### COMMITTEE HALL 1

*Topic Stream: Corporate Social Responsibility*

*Chair: Nonita T. Yap*

*Format: Paper Session*

CSR is increasing seen as a vehicle for sustainable economic development. The papers will speak to the following questions:

- What is driving the adoption of CSR? Is practice consistent with policy?
- Who benefit from CSR? When does CSR empower communities, when does it create dependency?
- When does CSR strengthen, when does it undermine local governance?

#### Corporate Social Responsibility in Ghana: Lessons

*Emmanuel Boon, Human Ecology Department, Vrije Universiteit Brussel, Belgium*

*Kwame Ababio*

Mining companies are accused of shirking their responsibilities towards the development of mining communities in Ghana. This paper assesses the impact of corporate social responsibilities of mining companies in Ghana.

#### CSR, SIA and Stakeholder Engagement

*Ana Carolina Gerheim, Environmental Resources Management*

This paper presents the process of Stakeholder Engagement (why, how) within a Social Impact Assessment as a key to Corporate Social Responsibility.

#### Best Practice Community Participation and Sustainable Development for an LNG Project in Yemen

*Thea Weeks, Golder Associates Africa*  
*Rochelle Chetty, Marliza Eloff, Herman Roos*

The well-being of stakeholders is improving for a Liquefied Natural Gas (LNG) project in Yemen, thanks in part to a thorough stakeholder-engagement process engaging adults and children.

#### Improving Environmental Transparency in Ghana

*Jonathan Allotey, EPA Ghana*  
*Anthony Ando, Ransford Sekyi, Yaw Sarfo-Afriyie, Esi Nana Nerquaye-Tetteh, Lambert Faabeluon, Haron Harrison-Affull, Shakeb Afsah*

Environmental disclosure through Ghana's AKOBEN program is expected to improve environmental compliance, strengthen corporate social responsibility and community awareness—a new model for environmental governance in the information age.

#### Sustainability in Mining: Myth or Reality?

*Bryony Walmsley, Southern African Institute for Environmental Assessment*  
*Okyeame Ampadu-Agyei, Alison Burger*

An analysis of the submissions for the Nedbank Capital Green Mining Awards over 3 years shows what it takes to be sustainable in the mining industry.

### CS 4.2 Public Participation and Land Use Planning in African Countries

#### COMMITTEE HALL 2

*Topic Stream: Public Participation*

*Chair: Seth Appiah-Opoku*

*Format: Paper Session*

The annual ritual of floods in many African cities demonstrates clearly that there is something fundamentally wrong with development planning in Africa. A comprehensive land use planning law and a framework is lacking. Subdivisions are prepared without public input and there are no urban growth management strategies. We invite papers that focus on planning issues in Africa, including transportation, urban design, comprehensive plans, housing, planning law/regulations, community economic development, land use planning, urban agriculture, land reforms, waste management, and citizen participation in planning and development.

#### Socio-Economic Diversification in Selibe-Phikwe

*Mompoti Solomon, NatSol Consultancy*  
*Thatayaone Dedede*

This paper evaluates the comparative and competitive advantage of a mining town and incorporates the findings into the mine closure plan to safeguard communities and livelihoods depending on it.

#### Community Land Rights and Well-Being in Mozambique

*Gunilla Åkesson, Swedish EIA Centre*

The importance of proper consultations and negotiations with local communities about land rights cannot be underestimated in the efforts in stimulating a sustainable and equitable socio-economic development

#### Enhancing Environmental Sustainability in Road Sector

*Abdissa Megersa Debela, Ethiopian Roads Authority*

The development of socio-economic conditions of any country, especially agricultural growth, depends on efficient road infrastructure. This should adequately address environmental issues during planning and implementation.

#### Environmental Analysis for Urban Planning in Caia

*Davide Geneletti, University of Trento*  
*Corrado Diamantini*

The result of the study was an urban plan that identified areas suitable for formal and informal settlements, as well as hazardous areas and nature conservation sites to be protected.

#### SEA of Spatial Plans through Land Use Scenarios

*Davide Geneletti, University of Trento*

The environmental impacts of land use scenarios were assessed through spatial indicators that were combined to provide a representation of the likely environmental performance of the land use plan.

### CS 4.3 Mainstreaming Biodiversity in Impact Assessment for Human Well-Being

#### PRESS CENTRE 1

*Topic Stream: Biodiversity & Ecology*  
*Format: Paper Session*

*Chairs: Asha Rajvanshi, Susie Brownlie*

Human societies have been built on biodiversity. Concrete actions to slow down biodiversity losses are needed to avoid undesirable ecological surprises and threats to human well being factors. The session aims to review how good impact assessment practices can help to deliver societal benefits and achieve biodiversity conservation.

#### Ecosystem Services Criteria for Urban Regions

*Tarja Söderman, Finnish Environment Institute*

The ecosystem services criteria are a means to mainstream biodiversity considerations into strategic planning of urban regions. It is demonstrated by GIS data for different planning and decision-making situations.

#### Seismic EIA as a Tool for Corporate Social Responsibility

*Forpah Napoleon Chi, Watershed Task Group (WTG)*

Seismic EIA contributes to corporate social responsibility for extractive industries (oil and gas) if host communities are opportuned to prioritize their livelihood alternatives during exploration and production.



# CONCURRENT SESSIONS

## Concurrent Session 4 | Wednesday, 20 May | 14:30-16:00

### IA to Solve Aircraft-Wildlife Collisions

*Morgan Hauptfleisch, Southern African Institute for Environmental Assessment*

Innovative application of Impact Assessment principles and methodology to reduce the threat to human life from aircraft-wildlife collisions at Namibian airports.

### CS 4.4 Asian SEA, EIA and Sustainability Assessment: New Approach and Review

#### PRESS CENTRE 3

*Topic Stream: Regional Perspectives*

*Chairs: Kii Hayashi, Jong Ho Lee*

*Format: Paper Session*

This session invites experiences, good practices and lessons learned in Asian impact assessment system and practices. It is a meaningful follow-up of "SEA/EIA development and cases in Asia" held in IAIAo6 and the "Asian SEA, EIA and Sustainability Assessment" session at IAIAo7.

### The SEHA on Southern Development Plan, Thailand

*Sayamol Kaiyoorawong, Project for Ecological Awareness Building (EAB)*

The paper is to conduct SEHA based on integration of local information and public participation approaches. This leads to communities providing their own strategic development plans with healthy society.

### Priority for Key Factors of SEA in Japan

*Kiichiro Hayashi, Nagoya University*

This study focused on clarifying what were key factors for the SEA system and its priority. How existing SEA schemes in Japan realized these factors in their systems was also analyzed.

### Development on the Environmental Performance Review

*Jeong Seok Choi, Joongbu University  
Chang Sug Park, Seungil Lee*

Urban environmental performance review system, 10 environmental indicators, was developed on the base of environmentally-friendly urban development and public transportation, ecological network and biodiversity, water resources, and energy efficiency.

### SEA of Tianjin Binhai New Area on the Water Environment.

*Lu Zhang, Tianjin Environmental Impact Assessment Center (Tianjin Environmental Protection Technology Development Center)  
Sufang Wei, Zesheng Zhang, Jianjun Xu, Xin Wang*

The report proposes that the use of non-conventional water sources and optimized allocation of water resources settle water scarcity to improve the bearing capacity of water resources.

### CS 4.5 Crisis, Disasters and the Environment in Africa (2)

#### PRESS CENTRE 4

*Topic Stream: Disasters & Conflicts*

*Chair: Charles Kelly*

*Format: Paper Session*

Crisis and disasters have, by definition, significant negative impacts on the environment and humans. These two Conflict and Disaster Section sponsored sessions focus how these negative impacts occur and how assessment efforts, practical approaches and capacity building can reduce human suffering following disasters and other crises.

### Armed Conflict, Peacebuilding, and the Environment

*Carl Bruch, Environmental Law Institute  
Lisa Goldman*

Understanding the linkages between armed conflict and the environment (especially natural resources), and post-conflict peacebuilding is essential to undertaking effective impact assessments.

### Environmental Intelligence in Crises Management

*Birgitta Liljedahl, Swedish Defence Research Agency (FOI)  
Annica Waleij*

A peace support or crises management operation can unintentionally have negative impacts on the local community. The presentation will discuss efforts being undertaken in order to reduce such impacts.

### Secret Data, Sensitive Analysis in Disasters and Conflicts

*Charles Kelly, AON Benfield Hazard Research Center*

"Can't tell you, it's a secret": The challenges of secret data and sensitive analysis in disaster/conflict assessments are considered. Practical approaches to these challenges are proposed.

### Reduce Environmental Impacts by Capacity Building

*Birgitta Liljedahl, Swedish Defence Research Agency (FOI)  
Annica Waleij, Helene Lackenbauer, Fanny Ruden*

The need for more coordinated efforts and a greater collaboration between military and civilian actors is discussed and examples from sustainability-related activities in order in Africa is given.

### CS 4.6 SEA in China: Practice, Experience and Lessons (1)

#### MEETING ROOM 1

*Topic Stream: Regional Perspectives*

*Chair: He Xu, Kin-Che Lam*

*Format: Paper Session*

Following promulgation of the EIA Law 5 years ago, some 500 SEAs have been undertaken in China covering mega-projects and development plans. This Session reviews current practices, identifies constraints, examines grounds gained and explores opportunities for greater effectiveness. It's a session about making a difference in impact assessment.

### Governing SEA: Chances and Limits for Application

*Olivia Bina, Chinese University of Hong Kong  
Holger Dalkmann, Ausra Jurkeviciute, Daniel Bongardt, Urda Eichhorst*

How can SEA influence decision making in China? Two case studies from a recent EU-China project provide insights into planning procedures and suggest useful changes to the institutional background.

### The Systemization and Legislation of SEA in China

*Tan Zhu, Research Center for SEA, Nankai University  
Yujie Ding, Qiumei Liu, Lili Tian*

The SEA system in China has gradually improved and has some unique characters, but there are still many schemes needed to adjust and reform to complete the SEA system.

### SEA in China: Status and Challenge

*He Xu, Research Center for SEA, Nankai University  
Huizhi Wang*

The paper reviews the development of SEA since China's EIA law implementation, analyzes the key issues, and proposes suggestions for the effective implementation of SEA in China.

# CONCURRENT SESSIONS

## Discussion on Public Participation in SEA

*Huang Lei, Hubei University of Technology  
Cheng Shenggao, Wan Duanji*

Public participation (PP) in SEA should be different from project EIA in the following aspects: timing, methods of information publicity, procedure and methods.

## 30 Years of EIA and SEA in Guangdong Province

*Renhai Wu, Department of Environmental Science, Sun Yat-sen University*

## Comparison of the Sustainability Concept of SEA between China and Denmark

*Jie Zhang, Aalborg University  
Jingjing Gao, Lone Kørnøev, Per Christensen*

This paper focuses on the sustainability concept for SEA application especially at the scoping stage in China by comparison with the experience in Denmark.

## Changing Focus and Paradigm of Environmental Assessments

*Kin-Che Lam, Centre of Strategic Environmental Assessment for China, The Chinese University of Hong Kong  
Yongqin Chen, Jing Wu*

The focus and paradigm of environmental assessment in China have changed substantially in the past two decades to meet with demands of development in China. This presentation outlines the changes that have taken places in response to the environmental challenges and development pressure, particularly focusing on the introduction and role of SEA.

## CS 4.7 Improving the Quality of Environmental Assessment Administration in Africa (1)

### MEETING ROOM 3

*Chairs: Easther Chigumira, Wanjiku Githinji, Faith Wanjiru, Charles Mwesige, Abdulrahman Issa  
Format: Paper Session*

The Environmental Assessment Professional Development (EAPD) Fellowship was started with the objective of strengthening environmental assessment and management as a tool for sustainable development in Africa. This program has mentored young upcoming environmental professionals from eastern and southern Africa through valuable assistance from various development partners and supporters. This session will ascertain whether tools such as networking and capacity building within Africa (i.e., by indigenous Africans for indigenous Africans) can be used as a sustainable mechanism to improve the quality of impact assessment professionals.

## Introduction/Background to the PD Fellowship

*Abdulrahman Issa*

## Effectiveness of EIA and its Frameworks in Tanzania: Finding from Practice

*Alexander Chambi, Centre for Environmental Assessment and Resources Management*

The paper is about EIA Framework in Tanzania. It review the Environmental Management Act Cap 191 and its Regulation and looks at Impact Assessment practice in Tanzania.

## Effective Project Management Teaming Strategies

*Henry Camp, Environmental Resources Management  
Ayaa K. Armah, Selorm Ababio, Emmanuel Lamptey*

Effective integration of local content and international experience in the EIA process starts with project management organisation. The authors will share experiences from the international and local points of view.

## EIA for Decision Making? Capacity Building Case

*Apophia Atukunda, ECL and UAIA*

Though EIA can be an effective decisionmaking tool, it is not used to support this due to lack of appreciation by developers and adequate skills and capacity by practitioners.

## Corporate Governance and Environmental Performance

*Adebanji Adekoya, Shell Nigeria  
Emmanuel Ekenyong*

Three-point strategy for improving environment performance in Africa includes acceptable regional environmental performance indices, reputable regional professional body to verify environmental performance of corporations, and regional environmental communication.

## Holistic Approach for Environmental Assessment

*Angela Barreda, Vector Peru SAC Ausenco Company Group*

This is a proposal for implementation in a consulting firm that can be used as a model for companies that want to implement it through a development-oriented approach.

## CS4.8 Impact Assessment's Contribution to Human Well-Being

### PRESS CENTRE 2

*Chair: To be confirmed*

## Environmental Social Impact Assessment (ESIA)

*Akosua Adomako-Bonsu, The University of Manchester*

The integration of EIA and SIA objectives in assessing a project. Draws out the various significant impacts of both the society and environment.

## Redefining Human Well-Being through Participation

*Wayne Huggins, Private Consultant*

The UN's Millennium Assessment framework for making decisions based on human well-being is weak. This paper uses Arrow's Impossibility Theorem in formulating an alternative decision framework.

## Potential Role of SEA and SA as Knowledge Brokers for Sustainability

*Maria Partidario, IST  
William Sheate*

SEA and SA, and the techniques they employ (e.g., stakeholder engagement, network analysis, geographical information systems), have the potential to act as platforms for knowledge brokerage.

## Species at Risk: An Indicator of Ecosystem Health

*Tom Hilditch, Savanta Inc.  
Marc Rondeau*

Species at Risk can serve as indicators of ecosystem health and of human health. New Ontario legislation speaks to this and provides innovative IA approaches including an "overall benefit test."

# CONCURRENT SESSIONS

Concurrent Session 5 | Wednesday, 20 May | 16:30-18:00

## CS 5.1 Corporate Stewardship and Risk Management: International Best Practices

### COMMITTEE HALL 1

*Topic Stream: Corporate Stewardship & Risk Management*

*Chair: Debra Zanewich*

*Format: Paper Session*

This concurrent session will focus on applying the IFC's Performance Standards, Equator Principles, and other international best practices in the context of private sector projects. Biodiversity offsets, trends related to environmental and social guidelines for some Japanese organizations, and monitoring of environmental and social commitments will be discussed.

### Biodiversity Offsets: Good Stewardship in Practice

*Susie Brownlie, deVilliers Brownlie Associates*

*Kerry ten Kate*

Biodiversity offsets for residual negative impacts on biodiversity can make good business sense, help reduce risks associated with new development, and provide "on the ground" evidence of responsible stewardship.

### Japanese Experience on Environmental Guidelines

*Takehiko Murayama, Waseda University*

In addition to guidelines on environmental and social consideration for ODA, some Japanese organizations have established guidelines for private sectors. This paper describes current trends on such kind of guidelines.

### Export Credit Agency's Experience with Monitoring

*Debra Zanewich, Export Development Canada*

An export credit agency's experience monitoring environmental and social performance for projects in developing markets.

## CS 5.2 Environmental Policy and Human Well-Being (1)

### COMMITTEE HALL 2

*Topic Stream: Environmental IA Law, Policies, & Practice*

*Format: Paper Session*

*Chair: Richard Akoto*

Human well-being assessment is one of the most difficult because there is no an all inclusive definition or legislative guidance to the process. This session will identify important policy gaps/issues in both legislation and definition, and provide approaches and tools for human well-being impact assessment.

### IA of Hydroelectric Dams in Brazil

*André Andrade, Brazilian Environmental Institute - IBAMA*

*Moara Giasson*

The aim of this paper is to discuss the main challenges related with the expansion of the hydroelectric energy and also the evolution of IA in Brazil.

### Health or Well-Being: Different Paths for EIA

*Mari Kågström, Swedish EIA Centre*

A main aspect for improving how human health is treated in EIA is the definition of health, which is crucial for the paths that the EIA and planning practice takes.

### Environmental Awareness as a Panacea for Sustainable Development

*Emmanuel Ekpennyong, Shell Nigeria*

Government, environmental practitioners and environmental rights groups must make deliberate efforts to create awareness of environmental sustainability issues among Africans to make businesses and regulatory agencies become more accountable.

### Guyana's Climate Initiative and Human Well-Being

*John Cartey Caesar, University of Guyana*

Guyana's Climate Change Initiative is a national policy response/commitment to climate change mitigation and adaptation recognizing full economic value of avoided deforestation for development/human well-being.

## Call for Community Sensitisation on EIA for Well-Being

*Alfred Tusanyuke Balinda, Community Based Impact Assessment Network for Eastern Africa (CIANEA)*

Decentralising environmental governance without communities' skills development on EIA for their activities is just like handing over an empty rifle to a soldier to fight the approaching enemy of catastrophes.

## CS 5.3 Social Licence to Operate and Participatory Processes

### PRESS CENTRE 1

*Topic Stream: SIA*

*Chair: Ilse Aucamp*

*Format: Paper Session*

This session investigate the importance of obtaining a "social license to operate" during environmental processes. It shows how increasing the well-being of the participants can improve the quality of participation during EIA processes.

### Retaining Social Licence in a Turbulent Market

*Timothy Hart, SRK Consulting*

Mining companies face tough cost management decisions in current market circumstances. Some may cut social investment, losing social licence to operate. Restoration is not guaranteed, placing the enterprise at risk.

### Human Well-Being During EIA Processes

*Tisha Greyling, Golder Associates*

*Mark Wood*

EIA processes can be stressful for stakeholders such that their quality of life deteriorates. But EIA practitioners can prevent this, and in fact can improve quality of life during EIA.

### Impact Assessment Practice and Wetland Villagers

*Leonard Akwany, Ecological Society for Eastern Africa*

A case study of wetland reclamation and commercial agriculture project with respect to EIA process and follow-up best practices.



## CS 5.4 Ensuring Development Provides Net Benefit to Society: Changing IA to Contribution Assessment

### PRESS CENTRE 2

*Topic Stream: Section: Environmental IA Law, Policies, & Practice*

*Chair: Nick King*

*Format: Workshop*

How should EIA evolve to deal with 21st century sustainability challenges? By moving to Environmental Contribution Assessment (ECA) which seeks to provide net societal benefits across all sectors, rather than "trade-offs" between sectors. Come and contribute to the development and refining of a new, improved IA process.

## CS 5.5 Size Matters: The Challenge of Impact Assessment for Mega Projects

### PRESS CENTRE 3

*Topic Stream Transboundary Issues*

*Chairs: Rachelle Besner*

*Format: Paper Session*

Is EIA able to deal with mega projects? Find out how practitioners manage the assessment of major energy and transport infrastructure, with problems of multiple legal requirements and decision-making processes, "salami slicing," the political dimension, high commercial stakes, multilingual consultation processes and more.

## SEA and Transboundary Energy Infrastructure

*Ivar Lyhne, Aalborg University*

Denmark faces development of large energy infrastructures transboundary scope and multiple actors challenges the application of SEA on strategic choices. Early experiences on applying SEA on transboundary projects are presented.

## EIAs of a Mega Project in Portugal and Spain

*Pedro Bettencourt, NEMUS, LDA.*

*Maria Grade*

Alqueva Dam and irrigation scheme, a mega project in Portugal and Spain, was greatly improved with EIA. A step by step approach including transboundary mitigation avoided major environmental impacts

## Finnish Perspective on Greenfield Nuclear Power Plant EIA

*Tiina Kähkö, Pöyry Energy*

*Mika Pohjonen*

This nuclear power plant EIA resulted in active public involvement and debate in Finland. The EIA report is one of the most extensive EIAs carried out in Finland.

## The Long Path Towards Sustainability

*Diego Ignacio Murguía, Comisión de Estudios Ambientales (CESAM)*

This paper performs a brief sustainability assessment of Argentina's large-scale mining sector and focuses on useful local experiences of citizenship participation.

## CS 5.6 Contention, Protest and Participation in Environmental Assessment

### PRESS CENTRE 4

*Topic Stream: Social Impact Assessment*

*Chair: Bert Enserink*

*Format: Workshop*

Environmental concerns often precipitate public contention which emerges during EIA processes. This workshop presents cases from the Netherlands, Australia, Brazil and Rwanda which highlight such politicized EIA. The workshop will discuss the legitimacy of contention, approaches to the study of contention and strategies by which contention can be effectively integrated into EIA.

## Analyzing Conflict-Prone Policy Processes

*Miriam Cuppen, TU Delft*

*Bertien Broekmans, Bert Enserink*

In this paper we analyze the consequences of a participative EIA procedure in conflict-prone policy processes. We analyse stakeholders' opinions in the Dutch case of the dike relocation Nijmegen.

## Starting Again When It All Goes Wrong

*Jenny Pope, Integral Sustainability*

Controversy and community opposition are forcing engineering-based infrastructure organisations to re-evaluate their approaches to planning and decision-making, and reconsider the role the community plays in these processes.

## Contention, Participation and Mobilization in EA

*John Devlin, University of Guelph*

The paper presents an example of effective public mobilization involving an environmental assessment process for an iron ore mine in Itabira, Brazil.

## NIMBY Phenomenon in Public Participation

*Pekka Hokkanen, Central Finland Regional Environment Centre*

Is criticism related to citizen's NIMBY argumentation justified? In this paper four reverse arguments are introduced. In some cases the phenomenon is just a paradox.

## CS 5.7 SEA in China: Practice, Experience and Lessons (2)

### MEETING ROOM 1

*Topic Stream: Regional Perspectives*

*Chair: He Xu, Kin-Che Lam*

*Format: Practitioners Exchange*

## Strategic-Based SEA: An Opportunity for China

*Maria Partidario, IST*

This paper will address the strategic approach in SEA as an evolution in its process of maturation, and it reflects on opportunities for improvement of SEA practice in China.

## The Application of SEA on Socio-Economic Plans

*Xiaoxin Shi, Department of Geography and Resource Management, The Chinese University of Hong Kong*

*Kin Che Lam, Hui Lin*

SEA will be an important method in influencing development planning and integrating environmental considerations into the socio-economic plans in China.

## SEA for Road Network Plans in China

*Zhixi Zhu, Research Center for Strategic Environmental Assessment, Nankai University*

*Hongtao Bai, He Xu*

A China-specific framework for Strategic Environmental Assessment of road network plans, including an institution-centred approach is proposed and then applied to the Road Network Plan of Hubei Province.

## SEA of Coastal Reclamation Planning: Frameworks and Cases

*Shang Chen, First Institute of Oceanography, State Oceanic Administration*

*Tao Li, Xianwen Bao, Rongzi Liu, Shunliang Yang, Xingguang Yu, Luoping Zhang, Yan Wang*

The SEA frameworks of coastal reclamation planning were proven practical for Chinese bays. A national standard on SEA of coastal reclamation planning have been drafted based on these results.

# CONCURRENT SESSIONS

Concurrent Session 5 | Wednesday, 20 May | 16:30-18:00

## Sustainable Development and Management of Water Resources

*Yongqin David Chen, The Chinese University of Hong Kong*

Based on the assessment of water availability and demand in Hong Kong and its neighbouring regions, experiences from the cross-basin water transfer scheme are to be discussed.

## Applying WEAP Model to Water Resource Assessment in SEA

*Jingjing Gao, Department of Development and planning, Aalborg University  
Per Christensen*

The study shows how WEAP model can be applied to water resources assessment in SEA for the first time in China.

## Integrating Spatially Explicit Modelling into Strategic Planning: SEA of the North South Economic Corridor in the GMS

*Pavit Ramachandran, GMS Environment Operations Center  
Lothar Linde*

The paper will focus on the regional uptake of spatial tools through the transboundary SEA of the North South Economic Corridor in the Greater Mekong Subregion.

## Plant and Vegetation Protection in the Gold Exploration Areas

*Huarong Zhou, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (CAS)  
Yangqi Li*

The characteristics of flora, vegetation distribution and main characteristics are introduced in the Gold Exploration Areas. 26 kinds of protection plant and 13 kinds of endemic plant should be protected.

## Utilize Analysis of Adjustment of Overall Arrangements

*Lifeng Yin, Tianjin Academy of Environmental Sciences  
Haoyun Huang*

Environmental impact assessment from the perspective of an analysis of regional development planning.

## Exploring Context-Specific Criteria for Good Practice

*Olivia Bina, Chinese University of Hong Kong  
Lex Brown, Maria Partidario*

To contribute to the ongoing debate on how to improve the practice of Plan EIA and SEA-type evaluations in China, the paper presents an initial set of good practice criteria.

## CS 5.8 Improving the Quality of Environmental Assessment Administration in Africa (2)

### MEETING ROOM 3

*Chairs: Wanjiku Githinji, Abdulrahman Issa  
Round Table Facilitators: Easther Chigumira, Faith Wanjiru, Charles Mwesige, Abdulrahman Issa, Eva Kassara, Abdi Adugna, Margaret Sikwesa, Severin Kalonga*

*Format: This session begins with an introductory presentation and thereafter breaks into a more informal roundtable discussion.*

The Environmental Assessment Professional Development (EAPD) Fellowship was started with the objective of strengthening environmental assessment and management as a tool for sustainable development in Africa. This program has mentored young upcoming environmental professionals from eastern and southern Africa through valu-

able assistance from various development partners and supporters. This session will ascertain whether tools such as networking and capacity building within Africa (i.e., by indigenous Africans for indigenous Africans) can be used as a sustainable mechanism to improve the quality of impact assessment professionals.

## Professionalism as a Key Component in Building EIA

*Faith Waruguru, University of Nairobi  
Wanjiku Githinji, Charles Mwesige  
Mutabazi, Esther Chingumira*

The paper aims to improve the curriculum for upcoming PD professionals in Africa by cascading PD experience.

## Round table discussion

## Concluding presentation, monitoring and evaluation system

*Abdulrahman Issa*



**D**IAMOND CEMENT (GH) LIMITED the Leading Cement producer in Ghana stands in front line due to its best Raw Materials proportioning, the State of Art Technology in cement manufacturing process and world class cement Packaging System.

## OUR PRODUCT

1. PORTLAND LIMESTONE CEMENT (PLC) – 42.5N GS 744:2004 which meets all customer demands.

> DIAMOND BRAND

PRIDE OF AFRICAN

> ARCHITECT'S CHOICE

> UNIQUE QUALITY, STRENGTH & DURABILITY

# CONCURRENT SESSIONS

## Concurrent Session 6 | Thursday, 21 May | 11:00-12:30

### CS 6.1 Impact Assessment and Public Participation in African Communities

#### COMMITTEE HALL 1

*Topic Stream: Regional Perspectives*

*Chair: Ilse Aucamp*

*Format: Paper session*

This session investigate the impact assessment procedures in African countries like Nigeria, Ethiopia and Uganda. The role of public involvement is specifically investigated. This is a joint session between the public participation section and the SIA section.

#### Compliance and Enforcement in EIA: Ugandan Experience

*Pius Kahangirwe, WSS Services (U) Limited*

EIA is still viewed as a symbolic exercise to satisfy the rules. Public involvement in the EIA process is not welcome since it is likely to raise difficult questions.

#### Environmental Pollution: A Case Study of the Impact

*Innocent Aprioku, Niger Delta University*

The Port Harcourt Oil Refinery Company should involve riparian communities in monitoring effluent discharge into the creek waters and educate them on the damages caused by pollutants to their fisheries.

#### Environmental Impact Assessment for Sustainable Development: Case Studies, Irrigation Dam Project in Amhara Region, Ethiopia

*Yohannes Afework Kassa, Sustainable Water Harvesting and Institutional Strengthening in Amhara Project*

The assessment made on this irrigation project revealed that negative environmental impacts and un-sustainability of the project is due to lack of implementation of EIA procedure.

### CS 6.2 Oil for Development (2)

#### COMMITTEE HALL 2

*Topic Stream: Oil for Development*

*Chair: Arne Tesli*

*Format: Paper session*

Oil for Development Program member countries present issues, problems and opportunities related to oil and gas developments and impact assessment in their own countries and situations.

#### Role of EIA in Addressing Oil Impacts in Albertine

*Paul Buyerah Musamali, National Forestry Authority  
Tom Rukundo*

Planning and conducting EIA activities, monitoring, and assessing implementation of mitigation measures are fundamental to ensuring sustainable management and development of oil and gas industry in Uganda's Albertine Rift.

#### Environmental Monitoring of the Impacts Caused by the Oil Industry on Fish Populations and Marine Ecosystems in Angola

*Silvana Faria*

#### Building a Global Network to Strengthen International Cooperation in Promoting Social and Environmental Impact Assessment in Oil and Gas Development

*Terje Lind*

### CS 6.3 Progress of Strategic Environmental Assessment (1)

#### PRESS CENTRE 2

*Topic Stream: Strategic Environmental Assessment*

*Chair: Lone Kørnøev (tentative)*

*Format: Practitioners Exchange*

The focus of this year's main session of IAIA's SEA section is on the progress made with the now-established instrument of SEA over the past few years. The session is open to all papers dealing with SEA applications in different sectors, contexts, world regions and organizations.

#### Idealism vs. Pragmatism in Sustainability Assessment

*Jean Hugé, Vrije Universiteit Brussel  
Luc Hens*

Conflicts between the need for a pragmatic approach and the transformational potential of sustainability assessment arise when designing customised frameworks: the case of the Belgian region of Flanders is analysed.

#### Barriers and Drivers for Effectiveness

*Lone Kørnøev, Aalborg University*

The paper analyses and discusses barriers and drivers for SEA effectiveness in a "best case" setting characterised by an integrated SEA mode.

#### Climate Change in SEA? A Danish Case

*Sanne Vammen Larsen, Aalborg University/Ramboll*

The paper sheds light on two issues: how climate change is included in SEA in the case of Danish river basin management plans, and the public's influence on the process.

#### SEA Effectiveness through Decision Making

*Anne Merrild Hansen, Aalborg University*

This paper presents an analysis of the process and interaction between an SEA and the decision making process of the Memorandum of Understanding of aluminium production.

#### SEA Act Application in Finland

*Tarja Söderman, Finnish Environment Institute*

The experiences of the implementation of the SEA Act were studied through an analysis of 35 SEA processes and recommendations were presented for the use of future SEAs.

#### Myths About Policy and Planning That Limit SEA

*Måns Nilsson, Stockholm Environment Institute  
Lars Emmelin*

This paper discusses "myths" about policy and planning that prevail in the SEA profession and limit the demand for it. It contributes to the debate about environmental assessment effectiveness.

# CONCURRENT SESSIONS

## Concurrent Session 6 | Thursday, 21 May | 11:00-12:30

### CS 6.4 Environmental Policy and Human Well-being (2)

#### PRESS CENTRE 3

*Topic Stream: Environmental IA Law, Policies, & Practice*

*Format: Paper Session*

*Chair: Richard Akoto*

Human well-being assessment is one of the most difficult because there is no all inclusive definition or legislative guidance to the process. This session will identify important policy gaps/issues in both legislation and definition, and provide approaches and tools for human well-being impact assessment.

#### Compliance with Safeguard Policies

*Emmanuel Kasimbazi, Faculty of Law, Makerere University*

The main focus of the paper is to assess whether the borrowers can comply with AfDB/WB environmental and social safeguards policies using the country systems.

#### "The Good Life": Quo Vadis?

*Mary-Jane Morris, MEGA  
Susie Brownlie, Cormac Cullinan*

Impact assessment in its current form does not address the underlying causes of the current environmental crisis. Critical shifts are necessary, initially focusing at policy level.

#### Evaluation of Environmental Legislation for Regulating Petroleum Impacts

*Richard Osaliya, Barugah Planning Consultant*

Environmental impacts of petroleum exploration, EIA legislation in Uganda and petroleum exploration, weakness of the legislation in relationship to petroleum exploration impacts, recommendations.

#### Poverty Reduction Strategies and the Environment

*Wame Hambira, University of Botswana*

The importance of incorporating environmental considerations in the development of poverty reduction strategies and how SEA could assist in this regard.

#### The Tradeoffs of Human Well-Being vs. Environment

*Wayne Huggins, Private Consultant*

Environmental policy should be formulated to enhance human well-being, through the sustainable use of the environment.

### CS 6.5 Climate Change and Impact Assessment (1)

#### PRESS CENTRE 4

*Topic Stream: Climate Change*

*Chairs: William Agyeman Bonsu, Yaw Amoyaw Osei*

*Format: Paper Session*

The session would explore fundamental and conceptual differences between climate change assessment and EIA systems. There would be presentation of various country experiences and adaptation projects

#### Climate Change in Warri, Nigeria

*Tonpagamo Tamuno, Niger Delta University Bayelsa*

Temperatures for Warri in the Niger Delta Region of Nigeria were collated and THI-Comfort Index was calculated. The upward trend of temperatures is indicative of decreasing human comfort.

#### Climate Change in Project-Level EIAs

*Karl Kim, Department of Urban and Regional Planning, University of Hawaii  
Scott Glenn*

We survey the international impact assessment community to determine whether the project level is an appropriate vehicle for addressing climate change.

#### Assessing Airlines' Carbon Offset Initiatives

*Risa Morimoto, Toulouse Business School*

This study reviews the level of disclosure of selected airlines' climate change strategy with a main focus on carbon offsetting and their actual impacts using content analysis.

#### How Shifting Cultivation Affects Climate Change and Human Well-Being in Cameroon

*Benjamin Tchoffo, African Centre for Applied Forestry Research and Development (CARFAD)*

Shifting cultivation, impact assessment, environmental policy, climate change, forestry and land laws, human well-being, Cameroon.

#### Impact of Climate Change

*Duncan Oyaro, ESF Consultants*

African countries' contributions to greenhouse gases are minimal, yet they are/will suffer the consequences of global warming. The impact of global warming is an environmental injustice that should be compensated.

### CS 6.6 Practical Issues in Health Impact Assessment

#### MEETING ROOM 1

*Topic Stream: Health*

*Chairs: Ben Harris-Roxas*

*Format: Workshop*

This interactive workshop will present participants with scenarios for discussion, each based on HIA practitioners' actual experiences of conducting HIAs. Participants will be invited to discuss their own views and experiences in small groups. This session builds on the successful sessions held in Seoul and Perth.

#### Selecting Environmental Health Indicators

*Anne Knol, RIVM  
Hanneke Kruize, Eva Kunseler, Brigit Staatsen*

Guiding principles for selection of appropriate indicators for integrated environmental health impact assessment.

#### A Tool for Community Health Planning: HIA and HNA

*Mark Divall, NewFields*

Health impacts and needs assessments are often considered separately with outcomes confusing project proponents. Integrating methodologies will allow planning for community health interventions based on future impacts and existing needs.

#### Assessment of Climatic Effects on Water Quality

*Nganjouon Dieu-Beni, University of Yaounde, Ministry of Water and Energy  
Nola Moise, Goulev Sidonie*

Climatic changes the world is facing alter the quality of spring water used as drink. Assessing their effects on bacteria and chemicals may help to predict consequences to health.

#### Environmental Impact Assessment as a Tool for Promoting Public Health in Local Communities: The Niger Delta Perspective

*Stephen Abah, Ambrose Alli University*

Using practical examples from impact assessment of development projects, the paper examines the role of health assessment within the IA to promote and protect the health of vulnerable communities.

#### Developing Just and Healthy Public Policy

*Debra Fox, University of Liverpool*

HIA has been identified as a means to promote social and environmental justice (SEJ). I present an analytical framework to evaluate the usefulness of HIA in promoting SEJ.



# CONCURRENT SESSIONS

## CS 6.7 Impact Assessment of Large Projects and Cumulative Impacts (1)

### MEETING ROOM 3

*Topic Stream: EIA*

*Chair: Evans Darko Mensah*

*Format: Paper Session*

Large projects generate significant environmental and social impacts which are sometimes transboundary in nature. This session explores the impact of large projects through the presentation of case studies.

### Environmental Impact Assessment of Large Dams

*Terry Baker, ILISO Consulting*

*Martin van Veelen*

Quality of life and social conflict issues in reconciling the desire for economic growth with the requirements of sustainable environmental management of large dam projects in Southern Africa.

### Evolution of Environmental Assessment Debates

*Francois Retief, North West University, South Africa*

An analysis of environmental assessment debates suggests that the profession is going through a period of serious introspection, questioning fundamental values and its very reason for existence.

### Cumulative Effects in Swedish IA Practice

*Antoinette Wärnbäck, Swedish EIA Centre*

The treatment of cumulative effects in impact assessment practice can be seen from a social psychology perspective. This research project deals with connections between knowing that, knowing how and attitude.

### Land Use Impacts in River Njoro Watershed


*Malachi Okello, Kings Consultancy*

The assessment is to establish the magnitude of the impact of land use change in the watershed. This will provide valuable information on how to develop the watershed management strategy.


### Planning Well-Being Conditions for Extractive Industry

*Giuseppe Magro, University of Bologna*  
*Virginio Bettini, Stefania Pellegrini*


The paper focuses on a regional risk assessment developed with a multi-modelling GIS approach on extractive district in North of Italy.




## GHANA PORTS & HARBOURS AUTHORITY



- State of the Art Equipment
- Very Reliable Security Network
- Ideally positioned for Transit Cargo to Burkina Faso, Mali and Niger
- 75% Stevedoring Operations privatized to generate stiff competition



- Customer-friendly Ports in West Africa
- Safe Navigation and Environment-friendly Ports
- Professional and trouble-free Workforce



The preferred Ports in the Sub-Region

Headquarters: P. O. Box 150, Tema, Ghana. Tel: (+233 22) 202631-9  
Fax: (+233 22) 202812 Email: gpha@ghana.com; headquarters@ghanaports.net

Port of Tema: P. O. Box 488, Tema, Ghana. Tel: (+233 22) 204136-8  
Fax: (+233 22) 204136 Email: tema@ghanaports.net

Port of Takoradi: P. O. Box 708, Takoradi, Ghana. Tel: (+233 31) 24073  
Fax: (+233 31) 22814 Email: takoradi@ghanaports.net

Burkina Faso Office: 11 BP 276 CMS Ouagadougou 11, Burkina Faso  
Tel/Fax: (226) 649432 Email: onpg@liptinfor.bf

**CORPORATE WEBSITE: [www.ghanaports.gov.gh](http://www.ghanaports.gov.gh)**



# CONCURRENT SESSIONS

Concurrent Session 7 | Thursday, 21 May | 14:30-16:00

## CS 7.1 The Impact of ICT on Public Participation in Impact Assessment

### COMMITTEE HALL 1

Topic Stream

Chair: Bert Enserink

Format: Practitioner Exchange

Modern Information and Communication Technology (ICT) tools have radically changed the possibilities for information sharing and public involvement in impact assessment. Interactive applications allow for project proponents and opponents to assess and appreciate the impacts of various interventions. In this session practitioners will present and demonstrate their favorite ICT tool.

## CS 7.2 People, Plants and Pangolins: Linking Social and Ecological Systems

### COMMITTEE HALL 2

Section: Agriculture, Forestry & Fisheries

Chair: Ilse Aucamp

Format: Paper Session

Impact assessment has developed rapidly since its conception. Both social and natural sciences contribute to the field of environmental management. This session will investigate the relationship between humans (social systems) and ecological systems. This is a joint session between the biodiversity/ecology section and the SIA section.

### Introduction to Session

Susie Brownlie

### Environmental Sustainability Knowledge of Students of Tertiary Institutions in Ghana

Paul Ofei-Manu, Independent Researcher

Results of the level of concern and knowledge of environmental sustainability among tertiary students in Ghana as a case study of a "southern" country is presented.

### Effects of River Environmental Conservation Advisers

Fumino Iizuka, Tokyo Institute of Technology

Sachihiko Harashina

In Japan, one of the citizen involvement methods for river management is the river environmental conservation adviser system. This paper shows how the system should be effective for ecosystem conservation.

### The Use of Mangrove-Constructed Wetlands

Cristina Rebelo, ICAT

José Guerreiro, Síxtus Kayombo, Karolis Njau, Melania Sangeu, Stephen Mwangi, Salomão Bandeira, Mércia Tembe

Three cases studies are presented. Detailed discussion for the expected impacts and mitigation measures is presented. Guidelines are provided for the elaboration of EIA studies for this type of facilities.

### Rice for Life: HIA of Seed Technologies

Duangjai Rungrojcharoenkit, Healthy Public Policy Foundation

Decharut Sukkumnoed, Thunyaporn Surapukdee, Putthina Nuntavorakarn, Yavitha Pithakwatchara, Suphune Saringkarn

Three approaches of the development of seed technologies are assessed through 5 key determinants of health leading to better understanding on health benefits and impacts of the existing seed technologies.

## CS 7.3 The Practice of Public Participation in Impact Assessment

### PRESS CENTRE 1

Section: Public Participation

Chairs: John Devlin

Format: Paper Session

The Public Participation International Best Practice Principles launched in 2006 set a high standard for public participation in EIA. This session will consider assessment indicators, information technologies, and consultation mechanisms that promise increased quality and improved practice of public participation in EIA.

### Performance Indicators for Public Participation

Bert Enserink, Delft University of Technology

Loes Witteveen, Rico Lie

Public participation best practices principles might be translated into SMART performance indicators for evaluation and benchmarking of our practices as a means to organize effective and just public participation.

### Good Practice Criteria for Non-Technical Summaries

Julio Jesus, Ecosistema, Lda.

The new version of the Good Practice Criteria for the Preparation and Review of NTS was prepared in Portugal in 2007/2008 and replaces the first version adopted in 1998.

### Expert Delegate Mechanism in Taiwan EIA

Hui-Wen Cheng, Environmental Protection Administration

In the research, sewage drainage pipeline of AUO Kueishan Hwaya Science Park changing project was provided to review the expert delegate mechanism in Taiwan.

### Evaluating Software to Capture Value Preferences

Richard Morgan, Department of Geography, University of Otago

Ngaio Fletcher

We simulate using a software package ("1000Minds") in an impact assessment, to see if it helps in capturing value preferences of local people.

## CS 7.4 Valuation of Ecosystem Services

### PRESS CENTRE 3

Topic Stream: Biodiversity & Ecology

Chair Arend Kolhoff, Roel Slootweg

Format: Paper Session

Recent experiences suggest that the recognition, quantification and valuation of ecosystem services, and involvement of their stakeholders, represents the best opportunity to translate biodiversity into language understood by decision makers. What methodological challenges lie ahead of us and what works best in practise?

### Pilot Projects in Environmental Management: A Case Study of a Floodplain Restoration Initiative in the Rhine Basin, Basel

Heleen Vreugdenhil, Delft University of Technology

Jill Slinger, Daniel Rueetschi

Pilot projects can be useful tools for IA. Pilot projects are dynamic processes. Critical cases and relevant actor involvement have an impact on pilot effectiveness.

### Challenges: Ecosystem Valuation and Human Well-Being

Wayne Huggins, Private Consultant

The paradoxes inherent in valuation methodologies would be shown, especially in the context of achieving Millennium Development Goals and improving human well-being.

# CONCURRENT SESSIONS

## Ecosystem Approach and Sustainability Appraisal

*Uzoma Ojike, Imperial College London*

This research aims to develop an integrated framework that incorporates ecosystem services in spatial planning/sustainability appraisal.

## West Africa: The Niger a Lifeline

*Arend Kolhoff, Netherlands Commission for Environmental Assessment  
Pieter Van Beukering*

A film/documentary presents the findings of an integrated assessment studying the down stream impacts of existing dams in the Niger river (West Africa) by using ecosystem services valuation.

## CS 7.5 Climate Change and Impact Assessment (2)

### PRESS CENTRE 4

*Topic Stream: Climate Change  
Chairs: William Agyeman Bonsu, Yaw Amoyaw Osei  
Format: Paper Session*

The session explores fundamental and conceptual differences between climate change assessment and EIA systems. There would be presentation of various country experiences and adaptation projects

## Coastal Change and the Perception of Risk

*Adam Barker, University of Manchester  
Richard Kingston, Iain White*

This paper explores the potential of PPGIS based solutions as a means of assessing stakeholder perceptions of coastal risk.

## Global Warming, Food Production, and Well-Being

*Jaime Martinez-Garcia, Economia - UASLP  
Ollin Segovia-Sanchez, Rodrigo Alonso-Salinas, David Vega-Niño*

This research is about the relation between global warming, food production and its effects on well-being and income distribution on Mexican urban population.

## Air Pollution, Climate Change and Human Well-Being

*Olaniyi Olatunde, Joseph Ayo Babalola University  
Oriye Olusegun*

This paper will present vivid account of emission from combustion and the causes and effects of climate change. The health hazard from gaseous emissions and its effect on man and plants is discussed.

## CS 7.6 Revising the International Principles and Developing Guidelines for SIA

### MEETING ROOM 1

*Topic Stream: Social Impact Assessment  
Chair: Frank Vanclay  
Format: Workshop*

Participants will discuss the International Principles for Social Impact Assessment as published by IAIA in 2003. Revisions for a second edition will be considered. There will also be a discussion about the need for SIA Guidelines, what they might be, and what process IAIA should follow to develop such Guidelines.

## CS 7.7 Progress of Strategic Environmental Assessment (2)

### MEETING ROOM 3

*Topic Stream: Strategic Environmental Assessment  
Chair: Chiara Rosnati (tentative)  
Format: Practitioners Exchange*

The focus of this year's main session of IAIA's SEA section is on the progress made with the now established instrument of SEA over the past few years. The session is open to all papers dealing with SEA applications in different sectors, contexts, world regions and organizations.

## Perspectives on SEA in Canada: Canada's Engagement

*Rachelle Besner, Foreign Affairs and International Trade Canada*

Aims to highlight good practices adopted in regards to Sudan and to adapt SEA requirements for the needs of a proposals to demonstrate value added on such an initiative.

## Enhancing Environmental Appraisal Effectiveness

*Paola Gazzola, Newcastle University  
Urmila Jha-Thakur, Sue Kidd, Deborah Peel, Thomas B. Fischer*

Internal context conditions can support appraisal effectiveness and foster learning, if policy-making organisations present the characteristics of a "learning organisation" embedded within its cultural, structural and behavioural conditions.

## The Role of SEA in Addressing EIA: A Case Study

*Chiara Rosnati, University of Sassari  
Chiara Porcu, Virginio Bettini*

This study analyzes the effectiveness of SEA applied to urban and special waste plans at a provincial scale in addressing the implementation of activities concerning waste management.

## Consideration of Health Effects in SEA

*Julia Nowacki, WHO Europe  
Marco Martuzzi*

Building on progress in impact assessment methodology and based on selected case studies, the paper aims at facilitating discussions about negative and positive health implications of proposal at strategic level.

## Comparison of the Third Party Review in SEA System

*Ryo Tajima, Tokyo Institute of Technology  
Sachihiko Harashina*

This study seeks to understand different kinds of forms for third party review in SEA systems and to discuss the advantages and flaws of them.

## SEA Concepts in Japanese International Cooperation

*Yuki Shibata, Tokyo Institute of Technology  
Naoki Takiya, Sachihiko Harashina*

Discussions of an advisory committee for New Japan International Cooperation Agency guideline for environmental and social considerations is illustrated with focusing on the SEA provisions.

## Policies for "Green Services": SEA Challenges

*Wes Fisher, The Cadmus Group*

Promoting "Sustainable service-led business" is increasingly mainstream policy in advanced economies. However, EA of policy interventions designed to alter the complexion of the service economy poses particular challenges.

# CONCURRENT SESSIONS

Concurrent Session 8 | Thursday, 21 May | 16:30-18:00

## CS 8.1 Documenting Good Practices in Biodiversity: Inclusive Impact Assessment for Sustainable Development

### COMMITTEE HALL 1

*Topic Stream: Biodiversity & Ecology*

*Chairs: Vinod B. Mathur, Asha Rajvanshi*

*Format: Paper Session*

This session has been designed to provide a forum to consultants, institutions and corporates to share their valuable experiences in planning and implementing good practices in biodiversity-inclusive impact assessment and to identify the gaps where further efforts and actions are needed.

### Assessing Landscape Level Impacts of a Coal Mine

*Asha Rajvanshi, Wildlife Institute of India*

For addressing landscape level conservation concerns, there is greater merit in promoting a "cluster approach" for assessing impacts of coal mines that have overlapping areas of environmental influences.

### IA of Wind Energy Projects Utilizing EC Guidelines

*Reg Ejeckam, Environment Canada*

*Paul Gregoire*

Environment Canada has developed a guidance document, "Wind Turbines and Birds: A Guidance Document for Environmental Assessment," which will improve the efficacy of review of wind energy projects.

### Environmental Specimen Bank Applications

*Myungjin Kim, National Institute of*

*Environmental Research*

*Byungho Yoo*

ESB will improve the effectiveness of EIA. Standard Operating Procedures (SOPs) in ESB is an important step to apply ESB to environmental monitoring and ecological assessment.

### Urban Green Spaces for Human Well-Being

*Ulf G Sandström, Swedish EIA Centre*

Urban green spaces as a multifunctional system are important for sustainable development, including human well-being, but these values are not fully understood by Swedish city planning authorities.

## CS 8.2 Participation in Impact Assessment: Strategies for Improved Practice

### COMMITTEE HALL 2

*Topic Stream: Public Participation*

*Chair: John Devlin*

*Format: Practitioner's Exchange*

This session continues the discussion of best practices. It considers a variety of approaches: process innovations, gendered responses, the role of journalists, and innovative training approaches that hold promise to improve our public engagement practice in EA.

### Towards an EIM Strategy for South Africa

*Lize McCourt, DEAT*

A new approach is needed to address the failures and improving the current system for managing environmental impacts in South Africa.

### Gender Representation in EIA Consultations

*Charlotta Faith-Ell, WSP Sweden*

*Lena Levin*

This paper discusses a project aiming at increasing the knowledge about women's and men's participation, opportunities to take part in, and influence the road planning process.

### Journalism and Environmental Impact Assessment

*Jean Paul Ntezimana, Radio Salus*

People should understand that over-exploitation of natural resources cause environmental degradation. However covering this issue, reporters get in trouble because they are considered as conflict of interest workers.

### Visual Problem Appraisal

*Loes Witteveen, Wageningen University*

*and Research Centre*

*Bert Enserink*

Visual Problem Appraisal is a tool for training on analyzing and structuring complex multi-actor issues. The heart of the VPA training kit are documentaries and filmed interviews with stakeholders.

## Environmental-Social Consideration Survey on WWTP

*Slavjanka Pejcinovska-Andonova,*

*Environmental Consultant-Freelancer*

The different EIA tools and techniques were applied for the first time in Macedonia during the preparation of the IIE study of the WWTP (waste water treatment plan) for Skopje city under the JICA support.

## CS 8.3 Impact Assessment of Large Projects and Cumulative Impacts

### PRESS CENTRE 1

*Topic Stream: EIA*

*Chair: Evans Darko Mensah*

*Format: Paper Session*

Large projects generate significant environmental and social impacts which are sometimes transboundary in nature. This session explores the impact of large projects through the presentation of case studies.

### Biotechnologies, Well-Being and Policy Issues

*John Cartey Caesar, University of Guyana*

The emerging global bioeconomy provides opportunity for sustainable use of biodiversity through biotechnologies. Developing countries like Guyana can adopt requisite, safe biotechnology-friendly national policies for human well-being.

### Management and Effective Sustainable Development

*Helena Addae, University of Wisconsin-*

*Whitewater*

The presentation provides a theoretical framework and empirical evidence of the effects of national culture dimensions such as individualism, uncertainty avoidance, and future orientation on sustainable development programs.

### CEAM: Now Is the Time to Establish Principles of Cumulative Effects

*Larry Canter, Environmental Impact*

*Training*

*Barry Sadler*

An initial set of best practice principles for cumulative effects assessment and management will be proposed and input will be sought from IAIAog participants.

# CONCURRENT SESSIONS

## CS 8.4 Progress of Strategic Environmental Assessment (3)

### PRESS CENTRE 2

*Topic Stream: Strategic Environmental Assessment*

*Chair: Joseph Somevi (tentative)*

*Format: Practitioners Exchange*

The focus of this year's main session of IAIA's SEA section is on the progress made with the now established instrument of SEA over the past few years. The session is open to all papers dealing with SEA applications in different sectors, contexts, world regions and organizations.

### Web-GIS Process for National SEA Guidelines

*Giuseppe Magro, IAIA-Italia*

*Virginio Bettini, Marco Sumini*

The paper describes IAIA-Italia's innovative approach for defining SEA guidelines supported by a dynamic GIS model where players can perform their evaluation framework and/or applying specific plan actions.

### Learning the Practice of Strategic-Based SEA

*Maria Partidario, IST*

*Gustavo Vicente, Bernardo Augusto, Victor Lobos, Rita Bruno Soares, Miguel Valentim*

The practice of strategic-based SEA enabled the recognition of key criteria for good practice of SEA that is compared and discussed with other international criteria.

### Regulating the Work-Sharing between SEA and EIA

*Martin Lund-Iversen, Norwegian Institute for Urban and Regional Research*

The paper explores central aspects of regulating the sharing of work between SEA and EIA in dealing with the repeated assessment of broader subject matters.

### Application of Landscape Metrics Analysis in SEA

*Cho Nam Ng, The University of Hong Kong*

*Xijun Yu*

This study provides a landscape approach to the scoping process in SEA that can be used to compare and evaluate the future landscape changes between different planning scenarios.

## Application of Ecological Footprint to SEA

*Joseph Somevi, Aberdeenshire Council*

The application of an ecological footprint to strategic environmental assessment moves SEA from subjective to objective evaluation and makes it a very powerful tool of communication to policy and plan makers.

### Partnership Approach to Delivering SEA

*Joseph Somevi, Aberdeen City Council*

Developing capacity in SEA through joint action and implementation yields high dividends. Dividends include effective in-house capacity, long-term quality, complementarity, innovation, improved networking, customer satisfaction and cost savings.

### Searching for the Purpose of SEA: National Findings

*Holmfridur Bjarnadottir, WSP*

A review of the national introduction of the SEA directive in Sweden, Iceland, and England showed substantial differences in the role given to SEA and expectations towards the SEA introduction.

## CS 8.5 AFF: Pulling It All Together for IAIAog Participants

### MEETING ROOM 1

*Topic Stream: Agriculture, Forestry & Fisheries/Biodiversity*

*Chair: Pamela Gunther*

*Format: Practitioner Exchange*

There is ample evidence showing that good planning and husbandry does maintain ecosystems and biodiversity, making sustainable AFF achievable. EIA can be very effective in making this happen. Our experience in several countries contributes to the growing acceptance of EIA as a powerful tool with plenty of potential to combat hunger and ecosystem degradation.

## CS 8.6 Oil for Development Workshop Session

### MEETING ROOM 3

*Topic Stream: Oil for Development*

*Chairs: Bryony Walmsley, Peter Tarr*

*Format: Workshop*

Using practical examples from recently completed SEAs in the oil and gas sector, the presenters will describe the SEA process, how to determine sustainability criteria, how to identify cumulative, synergistic and antagonistic effects and how to develop strategic environmental management plans relevant for the oil and gas sector. Participants will workshop these techniques with particular focus on the West African oil and gas sector.

### Notes



# POSTERS

## A Tool for Improving the EIS in Brazil

Paulo Roberto Armanini Tagliani, FURG  
Andre Del Mestre Martins, Milton  
Lafourcade Asmus

This work offers a protocol for decision-makers and analysts via Internet, establishing a high level pattern of analysis based on Guidance on EIA/ EIS Review 2001 from the European Community.

## Canada's Approach to Assessing Impacts of Trade Policies

Rachelle Besner, Foreign Affairs and  
International Trade Canada

Informs participants in regards to Environmental Assessment practices related to environment and trade policies, an opportunity to explore processes in Canada and speak to EA of Trade professionals.

## Environmental Impact Assessment in the R3 Road

Somvang Bouttavong, Water Resources  
and Environment Administration  
Thavone Vongposy

This project has managed the environmental and social problem on a satisfactory level; however, greater involvement of district and provincial authorities should be paid more attention in the consultation process.

## Climate Break and Spring Drinking Water Quality

Nganjouon Dieu-Beni, University of  
Yaounde/Ministry of Water and Energy  
Nola Moise, Gouleu Sidonie

Climate changes materialised by season disturbance in a central African equatorial area (Cameroon) affects notably chemical and bacterial water quality of springs.

## Environmental Impact of Tourism in Ladakh, India

Davide Geneletti, University of Trento  
Dorje Dawa

The study applied spatial analysis to understand patterns of tourism-induced environmental degradation, so as to support mitigation interventions, as well as the development of suitable tourism policies.

## Health Canada's Provision of Advice for Uranium Mine EAs

Rick Grabowewy, Health Canada

This poster reviews health related considerations specific to the uranium mining industry and discusses the advice that Health Canada commonly provides in EA processes for the protection of human health.

## POSTER SESSION

**TUESDAY, 19 MAY 12:30-13:30**

**VOTE FOR YOUR FAVORITE POSTER BY 11:00 ON THURSDAY, 21 MAY!**

### Community Social Impact Assessment

Kierstin Heiberg, University of Guelph

This study explores the use of Participatory Social Impact Assessment for rural community planning.

### SEA for the Port of Hai Phong

Jean Hugué, Vrije Universiteit Brussel  
Luc Hens, Van Hieu Vu, Thanh Nghi Duong,  
Dinh Lan Tran

SEA for the Hai Phong port shows impacts of different development scenarios, based on which a sustainable development plan can be built. SEA is an appropriate approach for this purpose.

### Sustainable Development and Human Well-Being

Oluwatosin Imolehin, Total  
Ibukunoluwa Olawuyi

Understanding the physical/biological dimension of earth systems is an important precondition for making sensible policy, protecting our environment. Sustainable Development is a matter of reconciling respect for the environment.

### A Comprehensive Restoration Plan of Lake Nakaumi

Yoshio Inouchi, Waseda University  
Morihiro Aizaki, Katsumi Takayasu,  
Hidenobu Kunii, Takao Tokuyoka

An attempt to restore the natural environment of Lake Nakaumi, western Japan, has been started. It is based on the Law for the Promotion of Nature Restoration in Japan.

### Toward the Realization of EcoTopia Society

Hideyuki Ito, Nagoya University  
Kiichiro Hayashi, Kazuo Koga, Yuzuru  
Tawara, Hideaki Itoh, Yasushi Inoue, Arata  
Katayama, Kuniyuki Kitagawa

The concept of the Indicators for EcoTopia Society (IES) for realizing Sustainable EcoTopia Society was proposed by discussing from the perspective of environmental, economic, social and human aspects.

### Impact Assessment Portuguese Language Network

Júlio Jesus, APAI  
Ana Roque

The poster presents the Network, the rationale for its creation, its mission and vision, the institutional arrangements and partnerships established so far and the current and future activities.

### Ecological Monitoring of the Aguçadoura Wave Farm

Júlio Jesus, Ecosystema, Lda.  
Pedro Raposo de Almeida, Bernardo  
Quintella, Paula Chainho, Nina Vieira,  
Vanessa Pinto, Henrique Cabral, Maria José  
Costa

The Aguçadoura Wave Farm (Portugal) is an innovative project which requires innovative solutions to implement an ecological monitoring program.

### Eliciting Stakeholder's Perspective in IA

Philippe Ker Rault, TU Delft

This article presents how flexible design based on Grounded Theory Methodology (GTM) can yield qualitative and quantitative data to elicit stakeholder perspectives in Public Participation (PP) in Integrated Water Management.

### Formulation and Evaluation of Corridor Alternatives

Sukhad Keshkamat, International Institute  
for Geo-Information Science and Earth  
Observation (ITC)  
Mark Zuidgeest, Joan Looijen

Application of a stakeholder-based spatial decision support system to generate highway routing alternatives using biophysical, social and economic considerations is demonstrated through a case study of Via Baltica in Poland.

### Environmental Considerations in Military Operation

Birgitta Liljedahl, Swedish Defence  
Research Agency (FOI)

The recognition of the benefits of integrating environmental protection with protection of human health as means of reducing unintended impact of peace support and crises management operations has increased.

### The Cultural Heritage Dimension in Slum Upgrading

Inge Lindblom, The Norwegian Institute for  
Cultural Heritage Research

The poster proposes that cultural heritage can contribute to improvements in human well-being in slums. In this matter SEA is a highly relevant tool for various development plans.



## Public Participation in NFIA Program of China

*Chuo Ma, Chinese Academy of Forestry  
Yihua Li*

It is urgent to build up infrastructure capacity, training practitioners, educating decision-makers, and motivating project constructions in the NFIA program.

## Human Well-Being in the Context of Concrete Aims

*Miroslav Martis, University of Life Sciences Prague  
Vlasta Lickova*

The main point of our work is to make sense of attitudes of people towards concrete aims and give more space to express their opinions.

## Impacts of Wind Energy Power Stations

*Miroslav Martis, University of Life Sciences Prague  
Vladimir Zdrzil*

EIA of four wind power stations in Czech-German borderland illustrates relatively controversial impact of this type of renewable energy source.

## Environmental Concerns in Artisanal and Small Scale Mining

*Charles Mwesige, Sustainable Management of Mineral Resources Project, Department of Geological Survey and Mines*

Unplanned mining of mineral resources can have adverse effects on the natural environment. Communities surrounding mining projects can be impacted upon adversely if there is no adequate planning.

## Knowledge of Environmental Sustainability Among Company Workers in Greater Sendai Area, Japan

*Paul Ofei-Manu, Independent Researcher  
Glynn Skerratt*

To determine whether the present degree of concern and knowledge of environmental sustainability among business workers in Greater Sendai RCE, Japan, reflects its occurrence in company publications and the media.

## NRI to Change Land Use Strategy of Sustainable World

*Toshiaki Ohkura, NRIC/NIAES  
Ryunosuke Hamada*

With a limited natural resources inventory (NRI), we have to revise our land use strategy to maximize solar and natural energy incorporation by converting them to agro-products and others.

## Ecosystem Approach and Sustainability Appraisal

*Uzoma Ojike, Imperial College London*

This research aims to develop a framework that integrates ecosystem services in spatial planning/appraisal.

## Constructed Mangrove Wetlands as Secondary Treatment of Waste Sewage

*Cristina Rebelo, ICAT  
Sixtus Kayombo, Karolis Njau, José Guerreiro*

The poster shows how constructed mangrove wetlands can be used for efficient secondary treatment of domestic sewage in East Africa. Recommendations for optimal sewage loading are proposed.

## Extrapolation Domain Analysis

*Jorge Rubiano, CIAT and CPWF  
Victor Soto, Maya Rajasekharan, Simon Cook, Boru Douthwaite, Indupulapati Rao*

Extrapolation Domain Analysis is a spatial analysis method that helps policy makers and investors in targeting interventions accurately and effectively for the solution of environmental and social problems.

## Republic of South Africa: Environmental Impact Management

*Franz Scheepers, Republic of South Africa: National Department Environmental Affairs and Tourism*

The National Department Environmental Affairs and Tourism is developing a stakeholder support strategy aiming at capacitating stakeholders in terms of their environmental rights. This includes stakeholders with special needs.

## Plan for Sustainable Development of Coast Albania

*Kalterina Shulla, Ministry of Public Works Transport and Telecommunication*

Conceptual plan based on strategy of two networks, water and traffic. Division of areas based on environmental principles, sustainable management of areas and flows. Evaluation of planning according to sustainability.

## Waste from the Brazilian Electric Sector

*Sirney Silveira, CPqD Telecom & IT Solutions  
Evandro Longui, Joceli Angelini, Roberta Soares, Sandra Ferreira*

Electricity Sector, significance and reduction of the environmental impacts produced by waste, study of disposal of waste and its consequences.

## Socio-Economic Diversification in Selibe-Phikwe

*Mompoti Solomon, Consultant  
Thatayaone Dedede*

Sustained survival of the mining town is an integral development for Botswana and is now high on the government's agenda.

## Impacts of Transport: Encouraging Potential Cyclists

*Katherine Taylor, University of Canterbury  
Simon Kingham, Glen Koorey*

This poster presents research on impacts of sustainable transport, particularly encouraging commuter cycling. The study focused on issues perceived by potential commuter cyclists, a group underrepresented in transport research.

## SEA for Development Strategies of Binhai New Area

*Lili Tian, Research Center for SEA, Nankai University*

The technical framework, indicators, methods and action plan for improving the environmental management capacity in the SEA for development strategies of Tianjin Binhai New Area in China is presented.

## HIA: A Health Tool for a Responsible Business

*Francesca Viliani, International SOS  
Ana Mensua*

HIA is a health tool that can assist a company to support communities to become more resilient to any possible negative impact and more prone to benefit from positive impacts.

## Public Participation: The Tana Delta Story

*Faith Wanjiru, University of Nairobi  
Patrick Muraguru, Hadley Becha*

Quality of Environmental Impact Assessment, poor stakeholder consultations, communities adaptation, conservation versus development.

## Sustainable Benefits in an LNG Project in Yemen

*Thea Weeks, Golder Associates  
Rochelle Chetty, Marliza Eloff, Pierre Gouws, Vassie Maharaj*

The living conditions of stakeholders (adults and children) are improving for a Liquefied Natural Gas (LNG) project in Yemen, thanks in part to continued stakeholder engagement and labour risk audits.

## The Akoben Environmental Disclosure Programme in Pictures

*Ransford Sekyi, EPA Ghana  
Sarfo Afriyie, Haron Harrison-Affull, Shakeb Afsah*

The success of the AKOBEN program depends on the quality and accuracy of the ratings it generates. The poster shows the step-wise approach to evaluate environmental ratings of companies.

# SPECIAL SESSIONS

---

## SPECIAL POST-CONFERENCE OIL FOR DEVELOPMENT SESSION

**Oil and Gas Developments:  
The Need for Impact  
Assessment and Capacity  
Building and Monitoring**

**GHANA COLLEGE OF PHYSICIANS  
& SURGEONS**

*Address: 54 Independence Avenue,  
Ridge, Accra (near Ridge Circle)*

*Chair: Arne Dalfelt, NIBR, Norway  
Facilitator: Richard Fuggle, University of  
Cape Town, South Africa*

Oil and gas development and policies are closely related to environmental and social sustainability issues, often giving rise to controversies and conflicts both at global and local scale. Impact assessment has the potential for conflict reduction by providing better and transparent information. However, good negotiation technique is an essential ingredient in securing the best deals for both parties when oil companies and government representatives meet. This session will include negotiation role plays where some participants will represent the oil and gas industrial interests, while other participants will represent government negotiators, environmental agencies, community interest groups etc. The session will be facilitated by Richard Fuggle, professor at the University of Cape Town.

**Friday, 22 May • 13:30-15:30**

---

## CAPACITY DEVELOPMENT AND LINKAGES FOR ENVIRONMENTAL ASSESSMENT IN AFRICA (CLEAA)

### 1. Monitoring and Evaluation Framework for Professional Development Fellowship Programme in Eastern and Southern Africa

---

**ROOM 219**

*Chair: Abdulrahman Issa*

Objectives:

- Review progress and challenges of the 5th round PD Fellowship programme.
- To present a monitoring and evaluation framework for PD Fellowship Programme.
- Agree on the reporting framework and format.
- Presentation of the Proposal for the 6th and 7th PD Fellowship Programme.

**Saturday, 16 May • 10:00-13:00**

### 2. Introduction and Orientation of the Fifth Round (2009) PD Fellows to IAIAog

---

**ROOM 219**

Objectives:

- To brief EIA PD Fellows about IAIA, mission, structures and operations/activities.
- To brief EIA PD Fellows on IAIA '09, programme, ways for effective participation for maximum benefit.
- To Guide on Preparation of the conference participation reports by all fellows.
- Feedback and lessons from 5th Round PD Fellows, 2009.

**Saturday, 16 May • 14:00-17:00**

### 3. Ordinary Session of the Capacity Development and Linkages for Environmental Assessment in Africa (CLEAA) Board

---

**ROOM 219**

**Tuesday, 19 May • 11:00-13:00**

### 4. Partnership for Environmental Assessment In Africa (PEAA) Coordinating Committee

---

**ROOM 219**

**Tuesday, 19 May • 14:30-17:00**

### 5. CS 4.7 and 5.8 Improving the Quality of Environmental Assessment Administration in Africa (1 and 2)

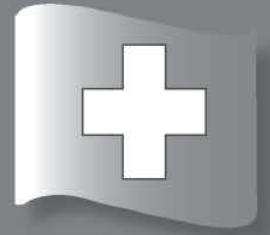
---

**MEETING ROOM 3**

See pages 31 and 34 for session details.

# Transitioning to the Green Economy

30th Annual Meeting of the International Association for Impact Assessment  
6-11 April 2010 | Geneva, Switzerland



Geneva's Lakefront Photo by AWKschlmann, Courtesy of Geneva Tourism

“We invite international experts, IA practitioners, sector leaders, and policy makers from industry, government, consultancies, donor agencies, and academia to collaborate on what needs to be done and how to attain this vision.”

Hussein Abaza  
IAIA10 Program Chair  
Chief, UNEP Economics and Trade Branch

## IAIA10 will

- Provide policy makers with tools to address the crisis.
- Show what impact assessment has to offer to make this transition.
- Focus on sectors that have potential for sustainable green investment: Agriculture, Industry, Tourism, Cities and Transport.

See [www.iaia.org](http://www.iaia.org) for details.

Host Organization



**IAIA**  
[www.iaia.org](http://www.iaia.org)

Paper and Poster Abstracts Invited  
Through 31 July 2009



# TECHNICAL VISITS AND TOURS

## ABOUT TECHNICAL VISITS

Registrations are accepted on a first-come, first-served basis until the visits reach the maximum number. Registrations will be confirmed in the order that payment is received.

Prices for technical visits are shown in US dollars. Participants must be pre-registered and pre-paid to participate. If you must cancel, the fee will be refunded, less an administration fee of 25% of the technical visit cost and contingent upon written notice of cancellation. After 3 April, no refunds are issued for cancellations or no-shows.

- Family members of registered delegates are welcome to register for technical visits.
- Casual clothing and walking shoes are recommended.

### A | Wetland and Nature Conservation, Forts and Castles

This 2-day tour involves visits to the historic Cape Coast Castle; the Kakum National Park with the excellent canopy walk; Amanzuri Conservation Area, which hosts a pristine wetland and fresh water lagoon (home to marine turtles, birds, crocodiles and monkeys); the remarkable Nzulezu Village on Stilts in the centre of Lake Tadane; and the Ankasa National Park, a wet evergreen forest of diverse and great botanical beauty and richness of over 3,000 plant species per hectare.

The tour requires an overnight stay at a hotel in Axim.

**Sunday-Monday, 17-18 May**  
**Depart 07:00**

**Minimum: 30 • \$100**

**Price includes transportation and lunches.**

**Price does not include other meals and hotel. Other meals and hotel will be additional and at the participant's expense.**

### B | Volta Lake/Akosombo Hydroelectric Power Project

The technical visit is in two parts, involving a stop at the Shai Hill Resource Reserve located just 40 kilometers from Accra and hence to Volta Lake at Akosombo.

The Shai Hills is a wildlife reserve that is home to species such as kob, bushbuck, oribi, baboon, various monkeys and a plethora of birds and reptiles. The reserve was the home of the Shai people up until 1892 and is a major archaeological site with excavations that have revealed large amounts of pottery, glass beads, and bone fragments of large mammals such as elephant and buffalo. The hills are dotted with the remnants of defence walls, grinding stones and pottery shards.

The second part of the visit will be Volta Lake, the largest reservoir by surface area in the world, covering almost 8,502 km<sup>2</sup> (3,275 m<sup>2</sup>) (3.6% of Ghana's total land area). The construction of the Akosombo dam required the flooding of the Volta River basin and its upstream fields, resulting in the creation of Lake Volta between 1962 and 1966. This necessitated the relocation of 80,000 people into 52 resettlement villages. Apart from providing electricity for much of the nation, it is also important for transportation, plied by both ferries and cargo boats.

The visit includes a tour of the dam site and some of the resettlement villages and a boat trip on the lake.

**Sunday, 17 May • 08:00-17:00**  
**Minimum: 30 • \$50**

**Price includes transportation and lunch.**

*Sponsored by Volta River Authority.*

### C | Aburi Botanic Gardens/Tetteh Quarshie Cocoa Farm/Bunso Arboretum Forest Reserve/Cocoa Research Institute of Ghana

This tour offers participants the opportunity to see nature and to learn about plant diversity in Ghana. The tour starts at the Aburi Botanic Gardens, established in 1890 and one of the world's 1,600 botanic gardens leading the fight to save plant diversity as well as create an understanding and awareness for the promotion of methods of conservation and development of plant resources. It is situated about 39 kilometers northeast of Accra and covers an area of 64.8 hectares (160 acres). Participants are then privileged to visit the first cocoa farm to be established in Ghana by Tetteh Quarshie and Mampong Akwapin from seeds brought from Fernando Po Island. This cocoa farm was the beginning of the major cocoa industry in Ghana.

The Bunso Arboretum Forest Reserve spans about 16.5 hectares of semi deciduous forest and indigenous trees and houses over 100 species of birds, some of which are rare. The visitors have an opportunity to go through many kilometers of nature trails identifying local trees and plants and the local uses along the way. The visit ends at the Cocoa Research Institute of Ghana at Tafo.

**Sunday, 17 May • 08:00-17:00**  
**Minimum: 30 • \$65**

**Price includes transportation and lunch.**



# TECHNICAL VISITS AND TOURS

## D | Old Accra and Korle Lagoon Restoration Projects

The Old Accra Restoration Project is a cooperative effort to preserve Ghana's architectural heritage. The project is located close to the Central Business District of Accra and involved historic buildings conservation and restoration work and renewal of old parts of Old Accra. The project is intended to demonstrate the value of historic preservation, particularly its role in preserving traditional building skills and the potential for developing cultural heritage tourism. Participants will have the opportunity to visit various restoration work being undertaken in Old Accra. This provides great insight into the history and culture of Accra and where the city started. The tour ends with a visit to the Korle Lagoon Restoration Project in the western part of Accra where participants will learn about the rationale for the restoration work, challenges (including the potential resettlement of a shanty town located along the banks of the lagoon) and various innovative solutions and approaches.

**Monday, 18 May • 09:00-16:00**  
**Min-Max: 30-60 • \$30**

**Price includes transportation and lunch.**

## E/F | Industrial Visit Tema Export Processing Zone, Tema Oil Refinery and Port of Tema

The Tema Export Processing Zone was established in 1999 as an industrial park for factories to produce for export. The Government of Ghana provided infrastructure support which was influenced by the outcome of a Strategic Environmental Assessment of the industrial enclave.

The enclave has its own simple biological treatment plant and waste management control system which facilitates the conversion of waste to energy for firing boilers.

The visit to the only oil refinery in Ghana will expose participants to the process of transferring crude oil from the harbour to the refinery and the refinery processes, particularly the operation of the refractory catalytic converter and tank farms for storage of crude and refined products. Emphasis is placed on the Environmental Management Systems incorporated into the plant, particularly the spill prevention and management systems.

At the Port of Tema, participants will see how an SEA of the Port Master Plan is influencing the further development and modernization of the port. The tour ends with a visit to the Cocoa Processing Company, where participants would be exposed to the entire process line from cocoa beans to liquor, butter, powder, and confectioneries including chocolate and pebbles.

**Monday, 18 May • 09:00-17:00**  
**Min-Max: 25-50 • \$45**

**Price includes transportation and lunch.**

**Jewelry must be removed and protective clothing will be provided at the factory.**

## G | Mining and Environment

The western region of Ghana is noted for mining, which poses great environmental challenges. This technical visit involves two mines: a gold mine at Tarkwa and a manganese mine at Nsuta. Participants will have an opportunity to be exposed to mine processes and the various environmental management measures introduced to make operations environmentally sound and socially acceptable. This tour includes an overnight stay at a hotel.

**Saturday-Sunday, 23-24 May**  
**Depart 06:00**  
**Minimum: 30 • \$100**

**Price includes transportation and lunches.**

**Price does not include other meals and hotel. Other meals and hotel will be additional and at the participant's expense.**

## H | Northern Sector Tour

This conference tour offers participants the opportunity to tour the northern part of Ghana. It involves travel from Accra to the Ashanti Region to visit the Bonwire village, known to be the home of Ghana's famous Kente Cloth; the Buabeng Monkey Sanctuary, where monkeys walk without fear among villagers who believe the monkeys and colobus monkey are their ancestors who have returned to live among them; and then to the Mole National Park, which offers a great safari-like experience and is one of the biggest elephant sanctuaries in Africa. Participants will spend a night at a nice hotel with a swimming pool located in the middle of the reserve. There will also be an overnight stay at a hotel in Sunyani in the Brong Ahafo Region.

**Saturday-Monday, 23-25 May**  
**Depart 05:00 (Check the message board or registration desk to confirm departure time.)**

**Min-Max: 20-80 • \$200**

**Price includes transportation.**

**Price does not include other meals and hotel. Other meals and hotel will be additional and at the participant's expense.**

---

**Technical visit participants should meet in the AICC Foyer a minimum of 15 minutes prior to the departure time.**

---



# SECTION ACTIVITIES

## MEET THE IAIA SECTIONS!

IAIA is a member-based organization which currently has twelve Sections that cover different types and aspects of impact assessment.

IAIA Sections provide opportunities for IAIA members with these mutual interests to share experiences and discuss ideas in an informal setting. Sections provide a forum for active topical debate and for development and promotion of good practice.

IAIA Sections have a chance to meet during each annual conference, and they also have a rolling program of work throughout the year.

The members of the Sections and their activities are the life-blood of IAIA: through the Sections, IAIA members can feed into the organization of each annual conference, publish different materials, and develop new lines of thought.

### WHY JOIN AN IAIA SECTION?

- When you pay the non-member conference rate, you automatically become an IAIA member and are eligible to join a Section.
- Sections are a networking forum for IAIA members, where you can meet your colleagues.
- Sections promote your personal professional development.
- Sections develop interesting activities that you may want to join.

### WHERE CAN I FIND THE SECTIONS AT IAIA09 IN ACCRA?

- All sessions that have been organized by the Sections will be clearly identified in the preliminary and final programs.
- Each Section will hold a Section meeting during the conference, which everyone is welcome to attend.
- Section chairs will be identified by ribbons on their name tags so that you can find them during the conference.

### ANY QUESTIONS?

Please contact Sections Coordinating Committee Chair Lea den Broeder ([lea.den.broeder@rivm.nl](mailto:lea.den.broeder@rivm.nl)) or the coordinator of a specific Section as listed at right, or visit [www.iaia.org](http://www.iaia.org) > Sections for more information.

## MAKE A DIFFERENCE—GET INVOLVED IN A SECTION CURRENT SECTIONS

**Agriculture, Forestry and Fisheries:** New in 2005, this Section focuses on finding ways and means of increasing and improving the application of EIA to these sectors based on study, research, and input from practitioners. Section coordinator and listserv facilitator: Patrick Duffy ([pjduffy@shaw.ca](mailto:pjduffy@shaw.ca)) and Mark Curtis ([curtis@nrs.mcgill.ca](mailto:curtis@nrs.mcgill.ca)).

**Biodiversity & Ecology:** Ecological impact assessment, biodiversity in impact assessment, ecological compensation and mitigation, impact assessment for protected area establishment and management. Section coordinators: Asha Rajvanshi and ([ar@wii.gov.in](mailto:ar@wii.gov.in)) and Susie Brownlie ([dbass@icon.co.za](mailto:dbass@icon.co.za)). Listserv facilitator: Andrea Athanas.

**Disasters and Conflicts:** Disseminate information on disaster issues and participate in the development of sustainable disaster management strategies. Section coordinators: Charles Kelly ([72734.2412@compuserve.com](mailto:72734.2412@compuserve.com)) and Michel Bouchard ([michel.a.bouchard@cogeo.com](mailto:michel.a.bouchard@cogeo.com)).

**Environmental Impact Assessment Law, Policies and Practice:** Environmental legislation and its vital role in EA policy and practice. A goal of this Section is to develop links with key legal organisations so that IAIA can play a part in the development of environmental legislation which will promote equitable and sustainable development throughout the world. Section coordinator and listserv facilitator: Jan de Mulder ([jan.demulder@bz.vlaanderen.be](mailto:jan.demulder@bz.vlaanderen.be)).

**Corporate Stewardship and Risk Management** (formerly Environmental Management Systems): Environmental auditing and management. Incorporating auditing and impact assessment into environmental management systems and the development and operation of corporate environmental strategies. Section coordinator: Debra Zanewich ([dzanewich@edc.ca](mailto:dzanewich@edc.ca)). Listserv facilitator: Angela Pinilla Urzola.

**Health Impact Assessment:** HIA throughout the world, integration of human health concerns into impact assessment, and human health risk assessment. Section coordinator and listserv facilitator: Ben Cave ([ben.cave@bcahealth.co.uk](mailto:ben.cave@bcahealth.co.uk)).

**Indigenous Peoples:** Indigenous issues in IA, developing guidelines for the recognition and full inclusion of indigenous concerns in all aspects of impact assessment, traditional knowledge, and impact assessment capacity building for indigenous people. Section coordinator: Chantal Otter-Tetreault ([chantal@gcc.ca](mailto:chantal@gcc.ca)).

**Integrated Assessment of Trade-Related Policies:** Promotes publication in IAPA of scholarly and general information on policy development, case studies, methodologies and codes of good practice that enables practitioners in the developed and developing countries to conduct IAs. Section coordinator: Rachel Besner ([rachel.besner@international.gc.ca](mailto:rachel.besner@international.gc.ca)).

**Public Participation:** Explore principles and techniques of effective public participation as part of EA. Section coordinators: Bert Enserink ([b.enserink@tbm.tudelft.nl](mailto:b.enserink@tbm.tudelft.nl)), John Devlin ([jdevlin@uoguelph.ca](mailto:jdevlin@uoguelph.ca)), and Dusica Radojic ([dusica.pula@inet.hr](mailto:dusica.pula@inet.hr)).

**SEA:** All aspects of strategic environmental assessment, development of legislation, and SEA as a tool for cumulative effects assessment, etc. Section coordinator and listserv facilitator: Thomas Fischer ([fischer@liv.ac.uk](mailto:fischer@liv.ac.uk)).

**SIA:** The development of professional good practice in all aspects of SIA, drawing on the experience of SIA practitioners in the private, public and academic sectors around the world. Section coordinator: Ilse Aucamp ([ilsea@lantic.net](mailto:ilsea@lantic.net)). Listserv facilitator: Frank Vanclay and others.

**Students and Early Professionals (SEP)** provides a forum for SEPs to exchange ideas and experiences. It is also intended to provide an opportunity to pursue improved SEP involvement in IAIA throughout the year and at IAIA annual meetings. Coordinator: Paola Gazzola ([Paola.Gazzola@ncl.ac.uk](mailto:Paola.Gazzola@ncl.ac.uk)).



We welcome  
**Newmont Gold Ghana Ltd.**  
as the IAIAog Premier Sponsor

## BOOTHS

- Newmont
- EIA Netherlands
- MTN
- EPA/CERSGIS
- AERC GHANA
- Golder Associates
- SAMBUS Company Limited
- Ghana Manganese Limited



## TABLES

- Delegate display of materials
- Book Share
- IAIA10

## GREENING THE CONFERENCE

Does IAIA practice what it preaches? Yes, and more so every year. IAIA takes the following steps (as practical and possible) to mitigate the impacts of our conferences:

- Limit printed materials; communicate via e-mail and web to the extent practical and possible
- Contract with venues that participate in green programs (e.g., hotels that provide a linen and towel reuse program)
- Use bulk servings and pitchers rather than individual bottles
- Use china and silverware rather than disposables
- Provide recycling bins for discarded paper products
- Ask delegates to confirm their attendance at events and functions to reduce waste and leftovers
- Provide evening sustainable dining options
- Encourage delegates to purchase carbon-offset credits for their flights

Delegates are welcome to make additional suggestions on the IAIAog conference evaluation form (which will be distributed electronically to delegates following the conference) or by contacting IAIA HQ at any time.

# GENERAL INFORMATION

## DEFINITION OF CONFERENCE TERMS

A **session** is a block of time, typically 90 minutes, during which discussion centers on a particular topic. Sessions may utilize a variety of formats, and the length of time available for presentations depends on the session format that has been selected by the session chair. Session formats include:

**Paper session:** In a paper session, authors orally present the findings of a prepared paper or project. A chaired paper session typically allows 4-5 presentations of 15-20 minutes each, including time for specific questions. Ideally, the chair allocates time for general questions and open discussion following the presentations.

**Theme forum:** Smaller than plenaries and larger than concurrent sessions, theme forums include "cut-above" presentations and discussions which address the conference theme, bring together on a particular topic the various aspects of impact assessment, and examine how those aspects apply to different sectors and issues.

**Workshop:** In a workshop, the topic is specific and seeks to resolve a defined problem, often through a combination of 2-3 short paper presentations and active discussion.

**Panel discussion:** In a panel, the speakers are invited. The chair introduces each speaker and puts each talk in perspective. Each speaker gives a brief (10-15 minutes) prepared presentation, usually presenting a different view or experience on the topic, followed by debate between the speakers and questions from the audience facilitated by the chair.

**Roundtable:** Involves a group of individuals, some of whom may be invited, holding an informal discussion on a specific topic or problem, with no formal presentations.

**Practitioner exchanges** provide an opportunity for up to 8 conference participants to present a brief (3 minutes) overview of their work and to network with others in the same field. Time does not permit presentation of full papers during the session, but abstracts will be included in the final program.

**Indaba:** For issues that arise during the conference and that delegates want to pursue through follow-up discussions. During the morning, participants post potential topics for discussion, and individuals interested in each topic sign up. If a topic generates sufficient interest, space is made available for the discussion to take place in the late afternoon.



## HOW TO GET THE MOST FROM THIS CONFERENCE

- **Inform, prepare, and orient yourself.** Check in early and then take time to walk through the venue to familiarize yourself with locations of activities before the rush of the conference begins. Read through the program carefully and highlight the sessions you want to attend. Read the summaries and prepare questions for the speakers.
- **Make a goal sheet.** Why did you decide to register for this program? What is it you expect to gain? Take a moment to think about your goals. Then clarify them by writing them down in your program. Look over your goal page throughout the conference; it will help you keep your goals focused.
- **Meet other people.** This is an excellent opportunity to expand your network of contacts. Sit next to someone you don't know, even if you've come with a group. Mingle during the breaks. Exchange business cards. Every participant here has a specific area of expertise; find out what it is instead of chatting about the weather. Let us suggest that one of your goals be to meet at least one person each day whom you intend to communicate with again on a business or social basis.
- **Participate!** Ask questions. Make contributions. Actively participate in the exercises. Consider the meeting room to be a "mental gym" where it's okay to run, fall, and get up again. You'll benefit much more by participating in the game than sitting on the sidelines.
- **Relate what you learn to yourself.** Don't settle for "abstract" knowledge. Have your current problems, conflicts and interests foremost in your mind. As you learn new approaches and techniques, relate them to your own situation.
- **Make a commitment to review your notes.** Right now, take out your calendar and make a one-hour appointment with yourself in a few weeks to "retake" the program. Don't put your good ideas away with your notes. And consider reviewing your notes each evening during the conference while your ideas and enthusiasm are fresh.
- **Write a "Dear Boss" letter.** If your boss or company sent you to the conference, thank them with a letter. Include a list of your action ideas based on your action plan and goals - what you intend to do or change as a result of what you have learned. If you paid your own way, still send the letter. It will show how committed you are to your own professional growth.
- **Enjoy yourself.** Start relaxed (rest and rehydrate to help recover from jet lag) and you'll leave refreshed, inspired and recharged. Forget about what's happening at the office. This is your conference. Get all you can out of it.

# GENERAL INFORMATION

## PUBLICATIONS

**Participants list:** A list of pre-registered participants is provided in the delegate packets. A final list of participants will be posted online following the conference.

**Proceedings:** IAIA will be publishing peer-reviewed papers online following the conference. The deadline for submission of papers for the peer review program was 15 March.

**Journal:** Participants are encouraged to submit their papers for possible publication in IAIA's journal, *Impact Assessment and Project Appraisal*. See [www.scipol.demon.co.uk/iapa.htm](http://www.scipol.demon.co.uk/iapa.htm) for submission information.

## PRESENTATION EQUIPMENT

LCD (PowerPoint) projectors and laptop computers are provided in each session room.

Presenters were responsible for arranging and paying in advance for any other equipment needed for their presentations by 1 April. Availability of equipment for on-site requests is not guaranteed, and payment is required at the time of request.

Presenters load their own files on the laptops provided; this should take no more than 2 minutes. For security reasons, the session rooms and laptops are not available until the break just prior to the start of the sessions, so plan to load your presentation during the break preceding your session.

PowerPoint files should be saved to memory stick. Preparation of files on a Mac computer is not recommended; the venue does not have Apple capabilities. Testing of a Mac presentation on an IBM or HP should have been done prior to arriving at the conference, and Mac presenters must provide their own VGA connectors.

## BUSINESS SERVICES AT AICC

Presenters are responsible for supplying their own session or poster materials. Because of high rental costs which would necessarily be passed on to all delegates in the form of higher registration fees, IAIA does not provide copying, printing, computers or other business services on-site.

## MEALS

Based on the data collected via registration forms, IAIA has estimated a percentage of vegetarian or special meals. This does not guarantee accommodation of individual preference.

## REGISTRATION AND FEES

All conference participants, including delegates, sessions chairs, invited speakers, organizers, exhibitors, and paper and poster presenters, are required to register for the conference at the full, student, or exhibitor registration rate.

Full and student registration fees entitle delegates to attendance at all sessions, coffee breaks, lunches 19-21 May, participants list, delegate satchel, conference proceedings, and special events, unless an additional fee is noted.

Delegates will receive a name badge upon check-in. The badge is an official pass and must be worn to obtain entry to conference functions. If tickets are required for any events, they will be distributed by HQ.

## PAYMENT AND REFUND POLICIES

Fees are accepted by MasterCard, Visa, or American Express and are charged in US dollars (USD). Checks or money orders made payable to IAIA in USD drawn on a US bank are also accepted.

Any registration after 30 April must be made on-site. Registration receipts are issued by mail only. Official receipts for registrations made after 30 April will be issued by mail after the conference.

IAIA will refund registration fees upon written request received before 21 March. A US\$75 processing fee will be retained. After 21 March, no refunds will be issued for cancellations or no-shows. Substitutions for paid registrants may be made in writing without financial penalty. Refunds will be issued after the conference.

## "QUICKPASS TO THE FAST LANE"

All conference participants whose registration and fees were received by 28 February were mailed a purple "Quickpass." Look for purple signs designating the Quickpass registration desk and show your Quickpass for express check-in!

## INSURANCE AND LIABILITY

IAIA, the organizing committee, and the venue will not be responsible for medical expenses, accidents, losses or other unexpected damage to property belonging to conference participants, either during or as a result of the conference and during all tours and events. Participants are strongly advised to arrange their own insurance for health and accident, lost luggage and trip cancellation.

## INFORMATION DESK

Portobello & Company will host a help desk at the AICC.

## CONFERENCE EVALUATION

An evaluation form will be sent electronically to all participants following the conference.

## LANGUAGE

English is the primary language used at IAIA conferences.

## TRANSPORTATION

Portobello & Company is providing pre-scheduled transport from hotels to AICC **only** for those who have booked hotel accommodations through them. After the first day of the conference, Portobello may be able to arrange transport for others, based on availability and advanced booking. If you have questions regarding transportation, please see the Portobello desk or contact Portobello at [info@portobelloandcompany.com](mailto:info@portobelloandcompany.com) or +233 243 340 344.

Public transport services such as taxis and buses are available for delegates' private movements, at their own expense. Vehicle rental services are also available in most hotels.

Please allow ample time to reach your destination; heavy traffic is a factor.

## TIPPING

Tipping is optional.

## ACCESS

The AICC and many smaller hotels do not have elevators and/or are otherwise not handicap accessible.

## SMOKING

Smoking in public places is prohibited.

## TAXES

Value Added Tax of 15% is charged on transactions.



# IAIA BUSINESS

## ABOUT IAIA

The International Association for Impact Assessment was organized in 1980 to bring together researchers, practitioners, and users of various types of impact assessment from all over the world.

IAIA members number over 2,500 and reside in over 120 countries. IAIA activities are carried out locally and regionally through its extensive network of Affiliates and Branches.

**IAIA's Vision:** IAIA is the leading global network on best practice in the use of impact assessment for informed decision making regarding policies, programs, plans, and projects.

**IAIA's Mission:** IAIA provides an international forum for advancing innovation and communication of best practice in all forms of impact assessment to further the development of local, regional, and global capacity in impact assessment.

**IAIA's Values:** IAIA promotes the application of integrated and participatory approaches to impact assessment, conducted to the highest professional standards.

IAIA believes the assessment of the environmental, social, economic, cultural, and health implications for proposals to be a critical contribution to sound decision-making processes, and to equitable and sustainable development.

## NOTES

## COUNCIL MEETING

**Thursday, 21 May • 12:40-13:30 • Meeting Room 3**

The IAIA Council serves as an advisory resource to the IAIA Board of Directors. The Council is composed of the Board, all Committee chairs, Section chairs, representatives of Affiliates and Branches, the CEO and Headquarters representatives, and the Conference Program Chair(s) for the current-year conference and any future known conferences. Council meetings are open meetings; all IAIA members are encouraged to attend.

## ANNUAL GENERAL MEETING (AGM)

**Wednesday, 20 May • 12:40-13:30 • Committee Hall 1**

This is the annual business meeting of the Association. All meeting participants are encouraged to attend, learn more about the operation of the organization, and ask questions.

### 2009 AGM AGENDA

1. Welcome, introductions, and confirmation of 2008 AGM minutes.
2. IAIA 2008/9: What have we done and where are we going?
3. Money matters.
4. IAIA Presents Excellence: Rose-Hulman and Outstanding Service Awards
5. Any debate? Items submitted in writing by members.
6. Have your say: Informal discussion of matters that members wish to raise.
7. Closing remarks.



Cocoa pods

# NOTES



# COMMITTEE/ABOUT THE HOSTS

## ABOUT THE HOSTS



### MINISTRY OF ENVIRONMENT, SCIENCE AND TECHNOLOGY

The Ministry of Environment, Science and Technology is responsible for environmental issues in Ghana, including policies, treaties and conventions. The Environmental Protection Agency is the technical implementation agency of the Ministry. The Ministry is very supportive of the Agency's work and has initiated programmes to strengthen environmental management at the local and national levels.



### ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency was established after the Stockholm Conference on Human Environment in 1972. It was formally established by NRC Decree 239 on 23 January 1974. This was at a time when there was worldwide growing concern on the dangers posed to the environment through careless human activities. The Agency was initially called the Environmental Protection Council (EPC), whose functions were mainly advisory.

The EPC continued to function as an advisory body for more than twenty years until 30 December 1994 when it was transformed into regulatory body as the Environmental Protection Agency Act, 1994 (Act 490). The EPA then became a body corporate with powers to sue and be sued. It was also given the responsibility of regulating the environment and ensuring the implementation of government policies on the environment.

The mission of the Agency is to co-manage, protect and enhance the country's environment in particular as well as seek common solutions to global environmental problems. Ghana has made significant progress in the development of a workable and efficient Environmental Impact Assessment System since 1989. The EIA system was established with the development of appropriate legislative and regulatory frameworks, EIA administrative machinery, EIA Procedures, in-country EIA capacity development for policy makers, parliamentarians, administrators, regulators, private sector, consultants, district assemblies and linkages with local as well as internationally recognized EIA centres of excellence. In recent years the Agency has played a pioneering role in mainstreaming environmental issues in national development in Ghana. This culminated in the successful conduct of strategic environmental assessment (SEA) of the Ghana Poverty Reduction Strategy I (GPRS) in 2004. Subsequent SEAs have been conducted on National Energy, Transport, Water and Shelter policies in Ghana.

The EIA process has made significant contributions and continues to be an integral part of decision-making in Ghana, particularly among regulatory agencies, local financial institutions, development assistance requirements, state divestiture programmes and insurance schemes.

The Environmental Protection Agency has since 2004 been organizing pre-conference training at IAIA annual conferences and will offer training again at IAIA09.

## IAIA-GHANA

### IAIA - GHANA

The local Affiliate of IAIA was formed on 25 July 1997 and was formally registered in Ghana on 8 February 1999. The affiliate was duly launched on 7 May 1999. The Ghana Affiliate is registered with the International Association for Impact Assessment and has an MoU outlining the responsibilities and benefits for all parties which was signed in April 2004 during the annual conference in Vancouver, Canada. IAIA-Ghana has a membership of over 80 with about 25 actively involved with its activities. Major activities undertaken by the Affiliate include hosting of the IAIA Board during its mid-term meeting in Ghana in 2001 and organizing EA Training for professional bodies in Ghana (Ghana Institution of Surveyors and Engineers) and members of the Affiliate. Affiliate members have been attending the IAIA Annual Conferences for many years.

## GHANA STEERING COMMITTEE

**Jonathan Allotey** (chair), Environmental Protection Agency

**Evans Darko-Mensah**, Refast Ltd.

**Yaw Amoyaw-Osei**, Centre for Environment & Health Research

**Ebenezer Appah-Sampong**, Environmental Protection Agency

**Christine Asare**, Environmental Protection Agency

**Kwabena Badu-Yeboah**, Environmental Protection Agency

**Emelia Brew-Butler**, Emellord Associates Ltd.

**Kwaku Sersah-Johnson**, Ministry of Transport

## LOGISTICAL ARRANGEMENTS BY

**Leslie Amissah**, Portobello & Company



# THE ONLY INTERNATIONAL, INTERDISCIPLINARY, EDUCATIONAL CONFERENCE DEDICATED TO ADVANCING THE ART AND SCIENCE OF IMPACT ASSESSMENT!

IAIA gratefully acknowledges these companies and organizations for their generous financial and in-kind support of IAIAog.

By sharing their resources, these companies and organizations demonstrate their commitment to the environment and contribute to the improvement of impact assessment around the globe.

When you meet a representative of these sponsors, at the conference or in the months ahead, please be sure to thank them for their contributions.

Printing of the IAIAog final program sponsored by Ghana Ports and Harbours Authority.

## CONFERENCE VENUE

Accra International  
Conference Center (AICC)  
Castle Road opposite State House  
P.O. Box 1054, Cantonments  
Accra, Ghana  
Phone +233 21 669600  
Fax +233 21 669825



International Association for  
Impact Assessment

International Headquarters  
1330 23rd Street South, Suite C  
Fargo, ND 58103-3705 USA  
Phone +1.701.297.7908  
Fax +1.701.297.7917  
info@iaia.org  
www.iaia.org

## PREMIER SPONSOR



## EARTH SPONSORS



Oil for Development Program  
**NORAD**

## CONTINENT SPONSOR



## ISLAND SPONSORS



Canadian Environmental  
Assessment Agency

Agence canadienne  
d'évaluation environnementale

## REEF SPONSORS

- Goldfields Ghana Ltd.
- First Atlantic Merchant Bank Limited
- AngloGold Ashanti
- Ghana Manganese Company
- MED Mining
- Kosmos Energy Ghana
- Volta River Authority
- Ghana Maritime Authority
- Cocoa Processing Company

IAIA STEWARDSHIP  
CORPORATE MEMBER

AECOM

MEDIA PARTNER

Japan for Sustainability