



Legal and Technical Commission

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Legal and Technical Commission, part I
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Agenda item 6

Status of the implementation of training programmes under plans of work for exploration and the allocation of training opportunities

Selection of candidates for training programmes under plans of work for exploration

Recommendations by the Legal and Technical Commission

1. During the intersessional period from July 2023 to February 2024, a total of 17 training programmes comprising 78 training placements were offered by 12 contractors pursuant to their contracts for exploration with the International Seabed Authority (see annex I). These placements comprised:

- (a) Twelve at-sea on-board training opportunities offered by Blue Minerals Jamaica Ltd. under its contract for polymetallic nodules;
- (b) One at-sea training placement offered by the Institut français de recherche pour l'exploitation de la mer (Ifremer) under its contract for polymetallic sulphides;
- (c) Three deep dive eLearning placements offered by Marawa Research and Exploration Ltd. under its contract for polymetallic nodules;
- (d) One geological studies internship placement offered by Ifremer under its contract for polymetallic sulphides;
- (e) Eight deep-sea mining online course placements offered by Loke CCZ I (formerly UK Seabed Resources Ltd. I) under its contract for polymetallic nodules;
- (f) Seventeen deep-sea mining online course placements offered by Loke CCZ II (formerly UK Seabed Resources Ltd. II) under its contract for polymetallic nodules;
- (g) Two deep dive eLearning placements offered by Cook Islands Investment Corporation (CIIC) under its contract for polymetallic nodules;
- (h) One environmental studies internship placement offered by Ifremer under its contract for polymetallic sulphides;
- (i) Four deep dive eLearning placements offered by the Federal Institute for Geosciences and Natural Resources of Germany under its contract for polymetallic nodules;



(j) Four Masters fellowships offered by Ocean Mineral Singapore Pte. Ltd. under its contract for polymetallic nodules;

(k) Two at-sea on-board training placements offered by the Government of the Republic of Korea (Ministry of Oceans and Fisheries) under its contract for polymetallic sulphides;

(l) Six at-sea on-board training placements offered by the China Ocean Mineral Resources Research and Development Association (COMRA) under its contract for polymetallic sulphides;

(m) One Masters fellowship offered by CIIC under its contract for polymetallic nodules;

(n) Three at-sea on-board training placements offered by China Minmetals Corporation under its contract for polymetallic nodules;

(o) Four theoretical training placements offered by JSC Yuzhmorgeologiya under its contract for polymetallic nodules, of which two comprised an at-sea on-board training component;

(p) Five theoretical training placements offered by the Government of the Russian Federation (Ministry of Natural Resources and Energy);

(q) Four theoretical training placements offered by the Ministry of Natural Resources and Energy of the Russian Federation under its contract for polymetallic sulphides.

2. To accommodate scheduling demands for the training programmes, the Legal and Technical Commission, before the commencement of part I of the twenty-ninth session and in accordance with the recommendations of the training subgroup, selected candidates for all of the above-mentioned programmes (see annex II).

3. In addition, during the first part of the twenty-ninth session, selections of candidates were conducted by the Commission for seven training programmes with a total of 21 placements being offered by four contractors, namely COMRA, CIIC, Ifremer and the Ministry of Oceans and Fisheries of the Republic of Korea (see annex III). Cumulatively, therefore, from July 2023 to 12 March 2024, the Commission enabled the selection of candidates from a total of 383 applications for 99 training placements across 24 training programmes that were offered by 12 contractors.

4. Candidates were selected on the basis of the criteria provided by contractors. Due consideration was given to gender balance¹ and equitable geographical distribution, with particular attention to the interests and needs of the least developed countries, landlocked developing countries and small island developing States, as requested by the Council in a decision adopted at the twentieth session (see [ISBA/20/C/31](#), para. 6) and reiterated in the decision of the Assembly relating to the implementation of a programmatic approach to capacity development ([ISBA/26/A/18](#)), adopted at the twenty-sixth session, and formalized through the adoption in 2022 of the capacity development strategy (see [ISBA/27/A/11](#)).

¹ Contractors continue to contribute positively to the implementation of the Women in Deep-Sea Research project by pledging 50 per cent of their training placements to women. More information is available at www.isa.org.jm/capacity-development-training-and-technical-assistance/widsr-project.

Annex I

Contractors' training programmes for which selections were conducted before part I of the twenty-ninth session (7 July 2023–1 March 2024)

<i>Date of receipt</i>	<i>Contractor</i>	<i>Exploration contract</i>	<i>Women in Deep-Sea Research pledge</i>	<i>Type of training</i>	<i>Places</i>	<i>Scheduled training time</i>	<i>Duration of training</i>	<i>Applications received</i>
28 April 2023	Blue Minerals Jamaica Ltd.	Polymetallic nodules	Yes	At-sea training	12	Fourth quarter of 2023 ^a	6–10 weeks	33
27 September 2023	Institut français de recherche pour l'exploitation de la mer	Polymetallic sulphides	Yes	At-sea training	1	October 2023–March 2024	45 days	Selected from roster of reserve candidates
10 February 2023	Marawa Research and Exploration Ltd.	Polymetallic nodules	Yes	Deep dive	3	23 October–31 December 2023	10 weeks	9
7 December 2022	Institut français de recherche pour l'exploitation de la mer	Polymetallic sulphides	Yes	Internship (geological studies)	1	February–April 2024	2–3 months	14
29 June 2023	Loke CCZ I (formerly UK Seabed Resources Ltd. I)	Polymetallic nodules	Yes	Theoretical (online) training	8	Fourth quarter of 2023 ^b	6–8 weeks	14
29 June 2023	Loke CCZ II (formerly UK Seabed Resources Ltd. II)	Polymetallic nodules	Yes	Theoretical (online) training	17	Fourth quarter of 2023 ^b	6–8 weeks	17
19 November 2023	Cook Islands Investment Corporation	Polymetallic nodules	Yes	Deep dive	2	15 January–31 March 2024	11 weeks	Selected from roster of reserve candidates
7 December 2022	Institut français de recherche pour l'exploitation de la mer	Polymetallic sulphides	Yes	Internship (environmental studies)	1	April–May 2024	2 months	10
6 March 2023	Federal Institute for Geosciences and Natural Resources	Polymetallic nodules	Yes	Deep dive	4	15 January–31 March 2024	11 weeks	8
28 November 2022	Ocean Mineral Singapore Pte. Ltd.	Polymetallic nodules	–	Fellowship (Masters)	4	August 2023 ^c	1 year and 2 months	10
1 December 2023	China Ocean Mineral Resources Research and Development Association	Polymetallic sulphides	Yes	At-sea training	6	January–March 2024	40 days	25
25 September 2023	Government of the Republic of Korea	Polymetallic sulphides	Yes	At-sea training	2	April or May 2024	30 days	35
19 November 2023	Cook Islands Investment Corporation	Polymetallic nodules	Yes	Fellowship (Masters)	1	2024–2026	2 years	14
16 November 2023	China Minmetals Corporation	Polymetallic nodules	Yes	At-sea training	3	Between June and November 2024	40 days	14

<i>Date of receipt</i>	<i>Contractor</i>	<i>Exploration contract</i>	<i>Women in Deep-Sea Research pledge</i>	<i>Type of training</i>	<i>Places</i>	<i>Scheduled training time</i>	<i>Duration of training</i>	<i>Applications received</i>
21 December 2023	JSC Yuzhmorgeologiya	Polymetallic nodules	Yes	Theoretical training only Theoretical and at-sea training	2 2	May–June 2024 Theory: May–June 2024 At-sea: between 2024 and 2025	Theory: 2 weeks At-sea: 2 months (60 days)	31
21 December 2023	Government of the Russian Federation	Cobalt-rich ferromanganese crusts	Yes	Theoretical training	5	May–June 2024	2 weeks	22
21 December 2023	Government of the Russian Federation	Polymetallic sulphides	Yes	Theoretical training	4	May–June 2024	2 weeks	21

Note: Details of current and past training proposals can be found at <https://isa.org.jm/training/contractor-training>.

^a The training was postponed by the contractor to the fourth quarter of 2024 owing to difficulties in finding a suitable research party.

^b The training was readvertised to attract more applicants, resulting in a delay of the scheduled training time to January–March 2024.

^c The training was readvertised to attract more applicants, resulting in a delay of the scheduled training time to August 2024.

Annex II

Results of selections of candidates conducted before part I of the twenty-ninth session

Blue Minerals Jamaica Ltd. (polymetallic nodules)

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
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Geotechnical

First-ranked candidates

1. Sinead Jahoor	Female	Trinidad and Tobago	SIDS
2. Enang V. Enang	Male	Nigeria	
3. Theresa Kong	Female	Malaysia	
4. Mohammed Masum	Male	Bangladesh	LDC

Alternates

1. Moses Ohwo	Male	Nigeria	
2. Toatu Amatia	Male	Kiribati	LDC/SIDS
3. Federico Pisani	Male	Argentina	

Geophysical/geochemical

First-ranked candidates

1. Ekemini Williamson	Male	Nigeria	
2. Bernard Sirma	Male	Kenya	
3. Mahomed Mounjouhou	Male	Cameroon	
4. Michael Kangútu	Male	Kenya	

Alternates

1. Josiah Stephen	Male	Nigeria	
2. Brian Lynch	Male	Jamaica	SIDS
3. Wesleandro Vasconcelos	Male	Brazil	

Biology

First-ranked candidates

1. Hettiwaththage Pushpamali	Female	Sri Lanka	
2. Laureana Nepomuceno	Female	Philippines	
3. Princess Mae Cenà	Female	Philippines	
4. Gerico Gibe	Male	Philippines	

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>Alternates</i>			
1. Teereta Roota Kanoua	Female	Kiribati	LDC/SIDS
2. Md. Mostafa Monwar	Male	Bangladesh	LDC

Cook Islands Investment Corporation (polymetallic nodules)

Deep dive

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Digvijay Rewatkar	Male	India	
2. Abdishakur Ahmed Ga'al	Male	Somalia	LDC

Cook Islands Investment Corporation (polymetallic nodules)

Masters fellowship

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidate</i>			
1. Nterei Bakoa	Female	Kiribati	LDC/SIDS
<i>Alternates</i>			
1. Joy Chat Asur	Female	Nigeria	
2. Mohamed Moallim Osman Mohamed	Male	Somalia	LDC
3. Franklin Oketch	Male	Kenya	

China Minmetals Corporation (polymetallic nodules)

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Coffi Gerard Franck Zinzindohoue	Male	Benin	LDC
2. Md. Azahar Hossain	Male	Bangladesh	LDC
3. Enoch Badu	Male	Ghana	
<i>Alternates</i>			
1. Brian L. Lynch	Male	Jamaica	SIDS
2. Ekemini Sunday Williamson	Male	Nigeria	
3. Kiamuke Itiowe	Male	Nigeria	

China Ocean Mineral Resources Research and Development Association (polymetallic sulphides)

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Sara Emanuel Ilani	Female	United Republic of Tanzania	LDC
2. Milly Jepkogei Koech	Female	Kenya	
3. Ezekiel Atanga Azuure	Male	Ghana	
4. Mohammad Khairul Islam	Male	Bangladesh	LDC
5. Donald Deda	Male	Albania	
6. Ivaldo D. J. Fumo	Male	Mozambique	LDC
<i>Alternates</i>			
1. Rushan Çako	Male	Albania	
2. Abdishakur Ahmed Ga'al	Male	Somalia	LDC
3. Ashan Hansitha Jayathilaka	Male	Sri Lanka	
4. Fation Dedaj	Male	Albania	
5. Raliya A. Hayatu	Female	Nigeria	
6. Daniel Charles Rukonu	Male	United Republic of Tanzania	LDC

Federal Institute for Geosciences and Natural Resources of Germany (polymetallic nodules)

Deep dive

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Sanjeet Ruhai	Male	India	
2. Naina Islam	Female	Bangladesh	LDC
3. Warsame Mohamed Atteyeh	Male	Somalia	LDC
4. Ezekiel Obiebi Agberen	Male	Nigeria	
<i>Alternates</i>			
1. Abdishakur Ahmed Ga'al	Male	Somalia	LDC
2. Wycliff Tupiti	Male	Solomon Islands	LDC/SIDS

Government of the Republic of Korea (polymetallic sulphides)

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Nisha Nair	Female	India	
2. Gayathra Charuka Bandara Aldeniyagoda Gedara	Male	Sri Lanka	
<i>Alternates</i>			
1. Ana Cristina Vasquez Vargas	Female	Costa Rica	
2. Ahmed Mohamed Yusuf	Male	Somalia	LDC

Government of the Russian Federation (cobalt-rich ferromanganese crusts)

Theoretical training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Oussoumanou Aminou	Male	Cameroon	
2. Abegail G. Dalanao	Female	Philippines	
3. Joseph Ayikobua	Male	Uganda	LDC/LLDC
4. Salma Akter	Female	Bangladesh	LDC
5. Ahmed Yasin Mohamed	Male	Somalia	LDC
<i>Alternates</i>			
1. Nazmun Nahar	Female	Bangladesh	LDC
2. Md. Faruk Hasan	Male	Bangladesh	LDC
3. Kiamuke Itiowe	Male	Nigeria	
4. Mohammed Nurul Hoque	Male	Bangladesh	LDC
5. Md. Mohi Uddin	Male	Bangladesh	LDC

Government of the Russian Federation (polymetallic sulphides)

Theoretical training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Md. Abu Sayem	Male	Bangladesh	LDC
2. Joyce Anorld Mlay	Female	United Republic of Tanzania	LDC
3. Rebeka Kaselebela Rugola	Female	United Republic of Tanzania	LDC
4. Roland Nicholas Wray	Male	Jamaica	SIDS

Institut français de recherche pour l'exploitation de la mer (polymetallic sulphides)

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidate</i>			
1. Turia Bokai	Female	Kiribati	LDC/SIDS

Environmental studies internship

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
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First-ranked candidate

1. Raz Shauqeena Batrisyeya Razmi Shah	Female	Malaysia	
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Alternates

1. Ignacia Acevedo Romo	Female	Chile	
2. Rena Tri Hernawati	Female	Indonesia	

Geological studies internship

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
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First-ranked candidate

1. Ann W. Wanjau	Female	Kenya	
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Alternates

1. Samantha Yahel Garcia	Female	Mexico	
2. Miranda Ikfi	Female	Cameroon	

JSC Yuzhmorgeologiya (polymetallic nodules)

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
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Theoretical training only*First-ranked candidates*

1. Minhazul Abedin Shakik	Male	Bangladesh	LDC
2. Denis Ombati Mogusu	Male	Kenya	

Alternates

1. Charles Lucas Makio	Male	Kenya	
2. Nasima Begum	Female	Bangladesh	LDC
3. Habiba B. Salawu	Female	Nigeria	
4. Aaron Enechojo Auduson	Male	Nigeria	

Theoretical and at-sea training*First-ranked candidates*

1. Richard Aidoo	Male	Ghana	
2. Sunday Akorede Akinola	Male	Nigeria	

Marawa Research and Exploration Ltd. (polymetallic nodules)

Deep dive

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Muthoni Kanyugo	Female	Kenya	
2. Ralph Carlo Evidente	Male	Philippines	
3. Shynuga Thirukeswaran	Female	Sri Lanka	
<i>Alternates</i>			
1. Digvijay Rewatkar	Male	India	
2. Santhalingam Thanusanth	Male	Sri Lanka	

Ocean Mineral Singapore Pte. Ltd. (polymetallic nodules)

Masters fellowship

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Hamisi Omari Kipalo	Male	United Republic of Tanzania	LDC
2. Kelongo H. T. Haileka	Male	Namibia	
3. Omar Khaled Qasem Ahmed Al-Shaqdari	Male	Yemen	LDC
4. Usman Abubakar	Male	Nigeria	
<i>Alternates</i>			
1. Shivnesh Rithik Nandam	Male	Fiji	SIDS
2. Muhammad Saleem Saleem Chang	Male	Pakistan	
3. Nnoke Obasi	Male	Nigeria	
4. Sarki Haggai Hezekiah	Male	Nigeria	

**Loke CCZ I (formerly UK Seabed Resources Ltd. I)
(polymetallic nodules)**

Theoretical (online) training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Peterlis Osamba	Male	Kenya	
2. Urias Andy Taylor	Male	Liberia	LDC
3. Anwar Zeb	Male	Pakistan	
4. Dayalutchmee Kodye-Domah	Female	Mauritius	SIDS
5. Alioune Faye	Male	Senegal	LDC
6. Idoko O. Ogbe	Male	Nigeria	
7. Lucia Cattana	Female	Argentina	
8. Faisal Shamim	Male	Pakistan	

**Loke CCZ II (formerly UK Seabed Resources Ltd. II)
(polymetallic nodules)**

Theoretical (online) training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Heidy Queenie Dias	Female	India	
2. Ralph Carlo T. Evidente	Male	Philippines	
3. Diana W. Kamau	Female	Kenya	
4. Sundi Kilugala Malomo	Female	United Republic of Tanzania	LDC
5. Eric Awuah Yeboah	Male	Ghana	
6. Clifton S. Cawley	Male	Jamaica	SIDS
7. Cheyne M. Howell	Male	Jamaica	SIDS
8. Godwin Mzumbi Mnyika	Male	Kenya	
9. Md. Mostafa Monwar	Male	Bangladesh	LDC
10. Sadiq Jalal	Male	Pakistan	
11. Valery Entroso Pascobello	Female	Philippines	
12. Nishal K. Anuth	Male	Mauritius	SIDS
13. Augustine Brown Ohas	Male	Nigeria	

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
14. Muhammad Saleem Saleem Chang	Male	Pakistan	
15. Henry Chukwuemeka Okonkwo	Male	Nigeria	
16. John Olorunfemi Kinrin-Ola	Male	Nigeria	
17. Ng'iro Joseph Ksang	Male	Kenya	

Abbreviations: LDC, least developed country; LLDC, Landlocked developing country; SIDS, small island developing State.

Annex III**Results of selections of candidates conducted during part I
of the twenty-ninth session****China Ocean Mineral Resources Research and Development
Association (cobalt-rich ferromanganese crusts)****At-sea training**

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Bharath Subramanyam Ammanabrolu	Male	India	
2. Janice H. Angengo	Female	Kenya	
3. Mpho Lydia Sehlabo	Female	South Africa	
4. Abbie A. Allela	Female	Kenya	
<i>Alternates</i>			
1. Ana Cristina Vasquez	Female	Costa Rica	
2. Asmaa Ali Saleh Ferikh	Female	Egypt	
3. Fahima Bellabad	Female	Algeria	
4. Brian L. Lynch	Male	Jamaica	SIDS

Engineering training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Adam Budi Nugroho Purnomo	Male	Indonesia	
2. Gabriela M. Alvarez	Female	Panama	
<i>Alternate</i>			
1. Henry Chukwuemeka Okonkwo	Male	Nigeria	

**China Ocean Mineral Resources Research and Development
Association (polymetallic nodules)**

Engineering training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Aiyush Prasad	Male	Fiji	SIDS
2. Feisal Dirgantara	Male	Indonesia	
3. Hamisi Omari Kipalo	Male	United Republic of Tanzania	LDC
4. Ahmad Muhammad	Male	Nigeria	
5. Md. Mohi Uddin	Male	Bangladesh	LDC

**China Ocean Mineral Resources Research and Development
Association (polymetallic sulphides)**

Engineering training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Igede Felix	Male	Nigeria	
2. Khadidja W. Abdallah	Female	Algeria	
3. Mohammed Masum	Male	Bangladesh	LDC
4. Zulkiflu Abdullahi Salisu	Male	Nigeria	

Cook Islands Investment Corporation (polymetallic nodules)

Seminar

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Fred Nderema Juma Barasa	Male	Uganda	LDC/LLDC
2. Ndeenda Ekandjo	Female	Namibia	
<i>Alternates</i>			
1. Randa Mejri	Female	Tunisia	
2. Omar Khlaed Qasem Ahmed Al-Shaqdari	Male	Yemen	

**Institut français de recherche pour l'exploitation de la mer
(polymetallic nodules)**

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Paula Fragueiro	Female	Argentina	
2. Md. Saeduzzaman Faraji	Male	Bangladesh	LDC
<i>Alternates</i>			
1. Nothando M. Duma	Female	South Africa	
2. Nadia P. Abesamis	Female	Philippines	

**Government of the Republic of Korea (cobalt-rich
ferromanganese crusts)**

At-sea training

<i>Name</i>	<i>Gender</i>	<i>Country of origin</i>	<i>Country classification</i>
<i>First-ranked candidates</i>			
1. Dina Hanifah	Female	Indonesia	
2. Nur Sakinah Binti Abdul Razak	Female	Malaysia	
<i>Alternates</i>			
1. Godwin Ezra Ikwutah	Male	Nigeria	
2. Fahima Bellabad	Female	Algeria	

Abbreviations: LDC, least developed country; LLDC, landlocked developing country; SIDS, small island developing State.