

NET/104/MILLS



Dalhousie University

International Ocean  
Institute



I.O.I. - Malta  
November 6, 1990

*Mr. Don Mills  
11 Lady Kay Drive  
Kingston 8, Jamaica, W.I.*

*Dear Don:*

*It was lovely, as always, to see you. I have followed up on all your suggestions, and am enclosing copies of my letter, as well as of the draft syllabus.*

*Surprise, surprise: Laura Facey and I are cooperating on a book for children, on the oceans. Just imagine: I wrote it on the plane, coming back from Jamaica to Halifax. When I deplaned, the book was finished!*

*Much love,*

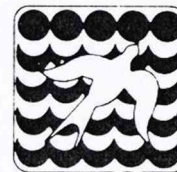
*Yours as ever,*

*Elisabeth Mann Borgese*



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I.O.I. - Malta  
November 11, 1990

*Dr. Don Mills  
11 Lady Kay Drive  
Kingston 8, Jamaica W.I.*

*Dear Don:*

*Could you do me an additional favour? Could you bring our training programme to the attention of the Prime Minister? The reason is that we would like him to address the closing ceremony. This is not at all unusual for our programmes. We usually have a Prime Minister, President, or Minister for Foreign Affairs as key-note speaker, either at the opening or at the closing.*

*I would not like to circulate this document, even in draft form, with the name of the PM on it -- if he does not even know about it!*

*Thanks a lot.*

*Warmest regards,*

*Elmally*  
Elisabeth Mann Borgese

JAMAICAN CENTRE FOR INTERNATIONAL AFFAIRS  
MARCUS GARVEY BUILDING  
9TH FLOOR, ROOM 906  
85 KNUTSFORD BOULEVARD, KINGSTON 5, JAMAICA W.I.  
TELEPHONE OR FAX: (809) 92-65535

January 21, 1992

Dr. Elisabeth Mann Borgese  
Pearson Institute  
1321 Edward Street  
Halifax  
Nova Scotia  
CANADA, B3H 3H5

Dear Elisabeth,

Your letter of 8th December reached me a few days ago, and I hasten to reply. I am sending out the material (your proposal and Draft Discussion Paper, and Pinto's Paper) to:

Anthony Hill - the Permanent Secretary, Prime Ministers Office who you met - for the Prime Minister; Ken Rattray and Patrick Robinson; Dennis Francis and to the Permanent Secretary in the Ministry of Foreign Affairs and Foreign Trade.

I have found the papers and your ideas very interesting. On the matter of the meeting of Caribbean Decision Makers I am not sure if you are aware that a CARICOM Summit takes place here on February 19. There will be meetings of Officials and Ministers in the days before. Maurice Strong is expected to be here for a day or two at that time.

I may have told you of my plan to put on a Symposium on The International Dimensions of the Environment Issue, using the Jamaican Centre for International Affairs of which I am Executive Chairman. I plan to have that on 19th February, the day of the Summit. I hope that some of the Caribbean Officials not in the Heads Meeting will attend.

I am also inviting people from Government here, Non-Government Organizations (NGOs), University, Media, etc. The purpose is to make people aware of the far reaching - implications of the environment issue for relations between states and for the International System.

CARICOM is holding a two (2) day Official Conference on Preparations for UNCED in Kingston on the 20th and 21st of February. Then the Law of the Sea Meetings start on the 20th also! Quite a hive of activity.

Dr. Elisabeth Mann Borgese

January 21, 1992

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I do not know when you plan to come here. Please let me know immediately if you will be here on the 19th.

In the Symposium I hope we can range over a number of important issues - such as the question of planetary or global management; the Law of the Sea and the concept of the common heritage of mankind; ecological interdependence; the necessary "transfer" of technology and of resources; international aid the advancing role of NGOs; the question of shared resources; cross border movements as in the case of acid rain, toxic waste and environmental refugees; the responsibilities imposed by the various conventions; disputes and the machinery for settling them; etc.

It would be great to have some one prepare a presentation which travels across these issues. I wonder if such a paper has been done?

Maurice Strong will, I expect, speak of some of these in his keynote address for the opening of the Symposium.

I will, perhaps have three (3) or four (4) short presentations on the Law of the Sea, the Regional Seas Programme featuring the Caribbean Environment Plan, biodiversity and biotechnology, and the various conventions.

There would be an opportunity for full discussion by those attending.

Let me know what you think.

Love,



---

Don Mills, O.J.  
Executive Chairman  
JAMAICAN CENTRE FOR INTERNATIONAL AFFAIRS

JAN 29 1992



Dalhousie University

International Ocean  
Institute

FAXED  
11:13 AM



I.O.I. - Malta

FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
FAX No: (809)926-5535

From: Elisabeth Mann Borgese  
FAX No.: 1 902 868 2818

Date: January 29, 1992

Subject:

Dear Don,

Your fax arrived just before I had to leave on this extended trip. Thanks very much. I intended to send you a fax, but am not sure whether it remained an intention...

I am planning to be there on the 19th. But the final decision depends on an appointment I requested with Boutros Ghali on the 17th or 18th. If it were to happen on the 18th, I still could arrive on the 19th, but would miss most of your meeting. I intend to stay for about 10 days. I shall let you know as soon as I know, which will be on the 15th when I return from Fiji.

I am looking forward to seeing you both.

Much love,

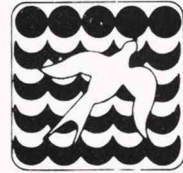
Much love,

*Elisabeth*



Dalhousie University

International Ocean  
Institute



I.O.I. - Malta

FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
FAX No: 809 926 5535

From: Elisabeth Mann Borgese  
FAX No.: 1 902 868 2818

Date: January 24, 1992

Subject: Your fax

*Not sent*

Dear Don:

Thanks very much for your fax of January 21. Yes: I want to come.

My schedule is, as, alas, most of the time, very hectic. I am returning from Fiji on February 15, intend to spend the week-end in San Francisco, with family - - if possible at all! -- I am awaiting an appointment with Boutros Ghali, hopefully on Monday February 17 or Tuesday the 18th, and I could proceed from there directly to Kingston. So I could make your date on the 19th. I would be very much interested in doing that. I will fax you later --as soon as plans in New York jell.

I then would stay about 10 days: for the first week of Prep.Com, and the beginning of the second week. Then I have to rush back to Halifax to take care of my class...

There are lots of things to discuss, and I am very much looking forward to seeing you. I am glad to know you found the documents interesting. It's the only way to go!

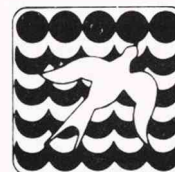
Much love to both of you,

*Elisabeth*



Dalhousie University

International Ocean  
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I.O.I. - Malta

FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
FAX No:

From: Elisabeth Mann Borgese  
FAX No.: 1 902 868 2818

Date: January 29, 1992

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Much love,

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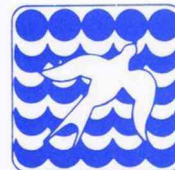
*Elisabeth*





Dalhousie University

International Ocean  
Institute



**FAXED**

**FACSIMILE TRANSMISSION**

**To: Don Mills**  
**FAX No: 809 925 6870**

**From: Elisabeth Mann Borgese**  
**FAX No.: 1 902 868 2455**

**Date: 14 March, 1996**

**Subject: Coming to Jamaica**

Dear Don,

This is to give you a little advance notice! I am coming this coming Sunday, to attend the final week of the Seabed Authority negotiations, and I do indeed hope to see you.

At the Pegagus they don't seem to have any room. I have sent a fax to Valerie Facey asking her to help find a room, so I don't know yet where I am going to stay. Shall give you a call on Sunday night or Monday.

Much love,

*Elisabeth*





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**FAXED**

FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
Fax: 809 92 568 70

From: Elisabeth Mann Borgese  
Fax: 1 902 868 2455

Date: August 5, 1996

Subject: Jamaica trip

Dear Don,

I am a week later than I thought I would be -- it is a tight schedule, and I had to shift my Seabed Authority attendance from the first week to the second week.

So I am going to arrive in Montego Bay on Saturday August 10, and stay with the Faceys until Sunday evening, when I shall come with them to town. I will leave the following Saturday.

I hope it is going to be a fruitful session!

All the very best, and looking forward to seeing you,

Yours as ever,

**Dalhousie University**cc. *Dr. Saigal***FAXED****International Ocean  
Institute**

## FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
Fax: 809 92 568 70From: Elisabeth Mann Borgese  
Fax: 902 868 2455

Date: October 6, 1996

Subject: Proposal

Dear Don,

Here is something for you to think about. It has been on my mind for quite a while, but just now I came across some fascinating figures in a little article by my friend Professor Johanna Dobereiner of Brazil, published in the latest issue of the Newsletter of the Third World Academy of Science. I am going to send you the whole article tomorrow.

Brazil, with the lowest pollution levels in the world, now is planting sugar cane on 4.2 million, 8 % of the land under agriculture. With mean yields of 64 tons/ha<sup>-1</sup>, in addition to sugar, 14.2 billion litres of ethanol are produced per year, equivalent to 260,000 barrels of petrol per day. Four million cars run on 80% ethanol and all gasoline sold in the country contains 20% absolute ethanol. Even though the petrol prices all over the world are low, the government is convinced of the social and ecological impacts of the biofuel programme and plans to expand it further.

In addition to this programme, new possibilities are being studied by Petrobras (you remember how impressive that company is) to replace 20% of the diesel oil by palm oil. It is calculated that the available land area is large enough to produce sufficient oil to replace all diesel oil used in the country (460,000 barrels per day)....

My proposal is that the SIDS, starting with the Caribbean islands, take up a joint project or projects, in cooperation with Brazil. Jamaica should take the initiative,

but probably Jamaica could not do it alone, for reasons of economy of scale; but it would be a marvellous project for the islands put together.

The advantages seem to be quite considerable.

1. Value added to the sugar industry.
2. New industries started, generating employment on a rather large scale;
3. Large savings on the import of petrol.
4. Reduction of green-house gases
5. Tremendous enhancement of South/South technology cooperation in the Caribbean.
6. Possibility of getting large financing from the GEF

I am sure it will not be easy to put together -- but nothing is easy, we know that!

I would love to have your reactions. The IOI would be happy to help in any way you might think useful, with project preparation, etc.

All the very best,

Yours as ever,

*E. Brundage*



Dalhousie University

International Ocean  
Institute



- Fax Cover Sheet -

**Date:** 10/8/96  
**Pages:** 5  
**To:** Ambassador Donald Owen Mills  
**Fax Phone:** 809-92 -6870  
**From:** Elisabeth Mann Borgese  
**Fax Phone:** 902-494-2034  
**Subject:** TWAS Newsletter Article

**FAXED**

# Economic, Ecological and Social Contribution of Biological Nitrogen Fixation in Brazil



Johanna Döbereiner,  
FTWAS,  
EMBRAPA - Centro  
Nacional de Pesquisa de  
Agrobiologia (EMBRAPA-  
CNPAB), Seropédica,  
Itaguá, Brazil

Agricultural development in the tropics is normally expected to be more dependent on nitrogen fertilizers than that in the temperate regions. Heavy rains and the more rapid decomposition of organic matter lead to leaching and rapid loss of the applied nitrogen fertilizers. In addition to their high cost, the application of large quantities of nitrogen fertilizers in the tropics induces severe ground water pollution problems. In Brazil, where nitrogen fertilizers are not subsidized by the government, agricultural development became economically unviable. Because of this, plant genotypes have been selected for high yields with low nitrogen fertilizer applications leading rather unexpectedly to crops which produce relatively high yields with low or no nitrogen fertilizers.

Table 1 gives an overview of the fertilizer applications in various representative countries in the world.

Among all countries in the world, Brazil applies on average the lowest nitrogen fertilizer doses. This is neither due to particularly fertile soils (as in most tropical regions, the majority of cultivated soils in Brazil are in fact very deficient in nitrogen and phosphorus), nor to the large areas available for agriculture; the main reason for the low doses of nitrogen applied is the high cost of these fertilizers. This has not only made Brazil's agriculture economically more viable and competitive, but has also reduced groundwater pollution problems, which is why Brazil is one of the least polluted countries in the world.

## The Brazilian Legume Crops

When soybeans were introduced into the country in the sixties, adaptation and

selection of genotypes of this crop were done with relatively high phosphorus, potassium and minor element applications, but with zero nitrogen. Consequently Brazil and Argentina, where these soybean varieties are used, became the only countries in the world where high yields of soybean were obtained with absolutely no application of nitrogen. Mean yields in Brazil are now more than 2 tons per ha and the total yield on the 12.5 million ha planted with this crop make up 25 million tons worth 5.7 billion US\$. Considering a nitrogen content of 6%, most of which is coming from  $N_2$  of the atmosphere, this amounts to 150 million tons of nitrogen equivalent to US\$1.6 billion. Because twice as much nitrogen fertilizers has to be applied than plants take up, this results in a saving of US\$3.2 billion worth of nitrogen fertilizer in the case of Brazilian soybean crops.

Beans (*Phaseolus vulgaris*), the main protein source of the Brazilian people, produce on average 600 kg.ha<sup>-1</sup> with inoculation used only in part of the country. Selection of more efficient and competitive *Rhizobium* strains and bean genotypes could increase yields to 1500 kg.ha<sup>-1</sup> with 4% nitrogen equivalent to US\$375 million (Hungria and Neves 1988). Many other legume crops have potential in the country, such as peanuts, and forage legumes, which contribute with additional funds to the economy and together are partly responsible for the low nitrogen fertilizer inputs in Brazilian agriculture. The central highland savannahs of Brazil, called Cerrados, have been partly transformed into highly productive agriculture with the plantation of inoculated soybeans, using inoculants specifically se-

Table 1. Fertilizer applications in the World (kg ha<sup>-1</sup>) (Solos e Adubos 1988)

Country	NPK	nitrogen	nitrogen/ potassium
Europe	335	172	4.3
China	142	87	11.4
USA	105	58	5.7
Mexico	63	36	7.6
India	46	27	7.6
Brazil	51	10	1.4

# ons of

lected for these regions (Botelho et al. 1988, Scotti et al 1988). If the whole cerrado area (210 million hectares) were planted with soybeans, enough protein could be produced to feed one third of the world's population at US standards (100 g protein per day).

New projects of reforestation with legume trees inoculated with selected rhizobia and mycorrhizae species and grown — before transplant to the field — in bags containing 50% rock phosphate, can substantially enrich eroded soils with nitrogen and organic matter.

## Nitrogen Fixation in Cereals and Forage Grasses

Because nitrogen fertilizers are not subsidised in Brazil, most genotypes and subsequently commercial varieties of cereals were selected for high yields with nitrogen fertilizer levels much below their needs. This inadvertently led to varieties which obtain part of their nitrogen from associations with diazotrophs. Initially this was attributed to rhizosphere bacteria, but it seemed difficult to explain that as much as 20 to 40% of plant nitrogen could be supplied by such associations. During the last decade, however, it became clear that such genotypes are colonised endophytically by various diazotrophs (Döbereiner 1992), some of which have not even been identified as yet. *Herbaspirillum spp.*, *Burkholderia spp.* and certain strains of *Azospirillum spp.* have been shown to colonise roots, stems and leaves of maize, and *Pennisetum* even plants such as rice (Boddey et al. 1995, Baldani et al. 1995) and wheat (Baldani et al. 1986, 1987). Programmes of selection of maize and rice genotypes for high con-

tributions of these diazotrophs indicate good chances of success (Bülow and Döbereiner 1975, Toledo, 1996).

## Energy Crops

The progress made in all areas of biomass energy has been much greater per unit expenditure than has been achieved in the pursuit of nuclear fusion (Rosillo-Calle et al. 1994). These authors suggest that if half of the money spent in the world on nuclear energy would have been applied on the study of bio-energy alternatives, large amounts of renewable energy sources would have been achieved. The elimination of nitrogen fertilizers for bio-energy crops represents the key to high energy balances. The Brazilian ethanol programme is the best example for this (Döbereiner, 1994). Sugar cane grown in the country for centuries never received high nitrogen applications and therefore the genotypes grown today have been shown to obtain the highest BNF contributions among all non-legumes.

When grown with ample potassium fertilizer and foliar applications of molybdenum, this crop can obtain up to 150 kg nitrogen ha<sup>-1</sup> year from BNF (Urquiaga et al. 1992). Sugar cane is now planted on 4.2 million ha in Brazil, 8% of the land under agriculture. With mean yields of 64 tons ha<sup>-1</sup>, in addition to sugar, 14.2 billion litres of ethanol are produced per year, equivalent to 260,000 barrels of petrol per day. Four million cars run on 80% ethanol and all gasoline sold in the country contains 20% absolute ethanol. Even though the petrol prices all over the world are low, the government is convinced of the social and ecological impacts of the biofuel programme and plans to expand it further. The key to this is a high energy balance which is shown in Table 2.

Due to the high nitrogen contributions certain sugar cane genotypes receive from BNF, we are now recommending to farmers to plant this crop without any nitrogen fertilizer and to use the funds otherwise used for nitrogen fertilizer for



Population: 160,737,489 (July 1995 est.)  
 Population growth rate: 1.22% (1995 est.)  
 31% of labour force employed in agriculture  
 Climate: mostly tropical, but temperate in south  
 Terrain: mostly flat to rolling lowlands in north; some plains, hills, mountains, and narrow coastal belt  
 Land use:  
 - arable land: 7%  
 - permanent crops: 1%  
 - meadows and pastures: 19%  
 - forest and woodland: 67%  
 - other: 6%  
 Irrigated land: 27,000 sq km (1989 est.)

**Table 2. Energy balance of ethanol production from sugar cane in Brazil (Boddey, 1995)**

Mean crop yields	65 t.ha <sup>-1</sup> .yr <sup>-1</sup>
Mean ethanol yields	3564 L.a <sup>-1</sup> .yr <sup>-1</sup>
Energy produced	
Ethanol	18,747 Mcal
Bagasse	17,500 Mcal
Total	36,297 Mcal
Energy expended	
Agriculture	4,138 Mcal
Factory	10,814 Mcal
Energy gain	21,345 Mcal
Overall energy balance	2.43
Energy balance assuming all factory power derived from bagasse	4.53
Energy balance assuming zero nitrogen fertilizer application	5.79

increased phosphate applications, spraying of Mo solutions ( $1/2 \text{ kg Mo.ha}^{-1}$ ) and irrigation. Elimination of burning the leaves before harvest, in addition, increases soil fertility, and the soil cover reduces needs for irrigation. The higher labour need for cutting unburned sugar cane helps to offer more jobs in the interior, but is compensated by further increased yields (Oliveira et al. 1994). The Pro-alcohol Programme has already created more than one million jobs and could be further expanded to help solve one of the major problems of our country, which is overpopulation in the major cities. In addition, elimination of cane burning will help to further reduce air pollution, which already

has reduced the lead content in the air of the large cities by 75%. Motor cars running on alcohol also emit 57% less CO, 64% less hydrocarbons and 13% less  $\text{NO}_x$  than cars running on gasoline.

### Possibilities for the Replacement of Diesel Fuel

In addition to the alcohol programme, new possibilities are being studied by the Brazilian state-owned oil company, Petrobras, to replace 20% of the diesel oil by palm oil. Oil palms in Brazil are grown in the poorest North East and in the Amazon regions, but Brazil is one of the tropical countries which produce lowest amounts of palm oil, only 0.6% of the world production. There are large areas available where oil palms could be planted, and it was calculated that 18% of this already-deforested area could produce sufficient oil to replace all diesel oil used in the country (460.000 barrels per day) (Oliveira 1985, Boddey 1993). Apart from relatively high planting costs, harvest costs are very low, as harvesting is done by hand and mules are used for transport. These areas could be reforested using legume trees mixed with oil palms, which not only would help to restore the Amazon forest, but also would create very important income possibilities for the very poor Amazon population, without adding to environmental problems. Oil palms can be harvested continuously throughout the year, and the fuel is processed by simple pressing, leaving much less residues than other biofuel production systems. Among all liquid biofuel alternatives, oil palms produce the highest amount of energy per ha followed by bio-ethanol from sugar cane (Table 3).

Among the different oil-producing crops, the oil palms (*Elaeis guianensis* and *Bactris gasipaes*) produce the highest oil yields per ha, ten times more than soybean or rape (Table 4).

Investigations into the possibilities of growing palm trees without nitrogen ferti-

**Table 3. Energy yields of the most productive biofuel plants (Döbereiner et al. 1981)**

	Yields ( $\text{t.ha}^{-1}.\text{yr}^{-1}$ )	Fuel ( $\text{L.ha}^{-1}.\text{yr}^{-1}$ )	Energy TOE*
Oil palm	35-38	3780	3.7
Sugar cane	60-90	4020	2.1
Manioc	13-40	2340	1.2
Sweet sorghum	35-50	1925	1.0

\* equal to  $10^7 \text{ Kcal.ha}^{-1}.\text{yr}^{-1}$

**Table 4. Oil and energy yields of different oil crop (Purseglove 1968)**

Plant	Growth period (days)	$\text{t.ha}^{-1}$ of oil	Energy TOE*
Oil palm	365	4.0-8.4	3.7-7.8
Pejibaye	365	4.8	5.7
Coconut	165	1.5	1.8
Rape	150	0.7	0.8
Soybeans	120	0.6	0.7

\* equal to  $10^7 \text{ Kcal.ha}^{-1}.\text{yr}^{-1}$

lizers, as is being done in the case of sugar cane, showed inconsistent and insignificant responses of genotypes planted in Brazil to nitrogen fertilizer (Chepate et al. 1988). This is because oil palms have always been planted in the poor Northeast and Amazon regions, where no nitrogen fertilizers are used. Based on this, we recently found numbers of  $10^6$  per g fresh weight of various diazotrophs in roots, stems and leaves of both, oil palms and peijibaye. *Herbaspirillum*, *Azospirillum amazonense* and some apparently new diazotrophs were isolated from these trees; even the grains of the palm trees contained the bacteria within the endosperm, explaining how they are transmitted (unpublished data from our laboratory).

With these findings there are now excellent possibilities to use palm oil for partial or even complete replacement of diesel oil. In the poor northern regions of Brazil, large areas of oil palms could be planted in mixed forests with legume trees and so recuperate eroded deforested areas with good profits for the local populations. This practice could then be extended to other tropical regions, primarily Africa, where the cultivation of oil palms recently has been decreasing. ♦

## References

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IOI / MILLS



Dalhousie University

International Ocean  
Institute



FAXED

FACSIMILE TRANSMISSION

To: H.E. Ambassador Don Mills  
Fax: 809 92 568 70

From: Elisabeth Mann Borgese  
Fax: 1 902 868 2455

Date: February 3, 1997

Subject: Caribbean Regional Seas Programme

Dear Don,

Here is something that I think calls for action. It is about the forthcoming Regional Seas workshop in Kingston.

I am attaching our IOI programme relating to this meeting, among others. We are sending all the Annexes by mail.

Would it be possible to cooperate with IOI Costa Rica on this? They could prepare the paper, and perhaps we could have a "leadership seminar" in Kingston prior to the intergovernmental workshop? I am presently trying to raise some funding for such a seminar. For the Caribbean I probably can get it from the Carl Duisberg Gesellschaft in Germany.

I am going to Lisbon in a couple of weeks, for the workshop on economics. It is creeping along. I wonder if and when they will get their act together in Lisbon!

All the best, and much love. I might give you a call, before taking off for Europe, to get your reaction to this proposal.

Yours as ever,

IDV/Mills



Dalhousie University

International Ocean  
Institute

FAXED



FACSIMILE TRANSMISSION

To: Don Mills  
Fax: 809 92 568 70  
  
From: Elisabeth Mann Borgese  
Fax: 1 902 868 2455  
  
Date: March 20, 1997  
  
Subject: Visit

Dear Don,

as you may guess, I am coming! Just for the last few days of the Sea-bed Authority meeting. I shall arrive on the 25th from Frankfurt, and stay until the 29th.

I hope all is well with you and am looking forward to seeing you.

As ever,

Elisabeth



Dalhousie University

International Ocean  
Institute

**FAXED**



FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
Fax: 809 92568 70

From: Elisabeth Mann Borgese  
Fax: 1 902 868 2455

Date: April 4, 1997

Subject: Regional seas, etc.

Dear Don,

Attached please find I note from UNEP which indicates new dates for the regional meetings. You will see that the Caribbean region now has been scheduled for November, which is excellent, because it gives you more time.

The other reason for writing to you today is to ask you whether you could give me a contact at the University and/or Government, to start preparing for the July/August training programme. These preparations should be started now.

It was lovely to see you.

Please give my warmest regards to the Faceys. I am so sorry I missed them this time, but hope to see them in August.

Much love,

1 DV / Mills

Don Mills

11 Lady Kay Drive  
Kingston 8  
Jamaica W.I.  
Tel/Fax: (809) 925-6870

6 April 1997

RECEIVED APR 09 1997

Dr. Elisabeth Mann Borgese  
International Ocean Institute  
Dalhousie University  
Fax: 1-902-494-2034

COPY

Dear Elisabeth:

I am writing to the Ministry of Foreign Affairs and Foreign Trade, (Mr. Anthony Hylton the Parliamentary Secretary) and to Miss Leone Barnaby at the Ministry of Environment and Housing on the two matters of which you wrote in your letter of 4th April - namely The new dates for the meeting on the UNEP/Caribbean Environment Plan, and your training programme.

As far as the University is concerned perhaps the best contact is the Vice Chancellor - Sir Alister McIntyre. There is the UWI Centre for Environment & Development at Mona, and there is also the Centre for Marine Sciences of which Dr. Jeremy Woodley is the Director.

There are others in the University who might be interested and perhaps that is why the Vice-Chancellor may be the best one to approach.

I hope that you get early and positive responses when you write.

Love  
Don 

10V/Mills

FAXED

FACSIMILE TRANSMISSION

To: Ambassador Don Mills  
Fax: 876 92 56 870  
  
From: Elisabeth Mann Borgese  
Fax: 1 902 868 2455  
  
Date: January 24, 1998

Dear Don,

Here it is, for your information. Many thanks This looks very good!

I am also attaching my latest to Arnaldo Ventura. No answer thus far -- and it is getting late for doing anything worth while! Could you find out whether they want to do this, or not. We can also do it alone!

*see Jamaica General*

Much love to both of you, and looking forward to seeing you in Rabat!

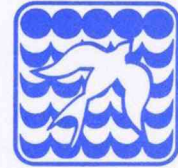
Yours as ever,

~~Subject:~~ *Elizably*



Dalhousie University

International Ocean  
Institute



FAXED

FACSIMILE TRANSMISSION

To: H.E. Ambassador Don Mills  
Fax No 876 92 568 70

From: Elisabeth Mann Borgese  
Fax No. 1 902 868 2455

Date: October 10, 1998

Subject: UNGA initiative

Dear Don,

Here is the latest.

Did you have a chance to discuss the matter with Don Campbell? How did he react? We are now trying to mobilize support in Canada!

I had a call from the Austrian Ambassador yesterday: The EU is seriously considering the proposal. Only the UK is adamantly against it! Of course, the G77 is in favour.

If you can help mobilize support at the GA now, that would be wonderful. Our representative there is Ambassador Bhagwat Singh, of the AALCC.

Much love,

*Elisabeth*