Capítulo 7

Conclusiones

La concentración de CO_2 y otros gases de efecto invernadero en la atmósfera se está incrementando como resultado del uso de combustibles fósiles, la producción de cemento y el cambio en el uso de la tierra. Este incremento de gases de efecto invernadero en la atmósfera está conduciendo al cambio climático y al calentamiento global. La preocupación acerca del cambio climático condujo al Protocolo de Kyoto, en una gran mayoría de los países se comprometieron a la reducción de sus emisiones de gases de invernadero y a incrementar los sumideros de carbono. Actualmente, la biosfera se considera que sea un sumidero de carbono que absorbe alrededor de 2,8 gigatoneladas de carbono al año, lo cual representa el 30 por ciento de las emisiones de los combustibles fósiles.

El proceso de secuestro de carbono del suelo o flujo de carbono al suelo forma parte del balance del carbono global. Muchos de los factores que afectan el flujo de carbono hacia y desde el suelo son afectados por las prácticas de manejo de la tierra. Si bien se desconoce el potencial real de retención del carbono del suelo terrestre, cualquier acción para secuestrar el carbono en la biomasa y en el suelo, en términos generales, incrementará su contenido de materia orgánica. A su vez, esto tendrá un impacto positivo sobre los ecosistemas desde el punto de vista ambiental, agrícola y sobre la biodiversidad. El potencial de secuestro de carbono a largo plazo se determina mediante el ingreso de carbono en los suelos y el tiempo de residencia en el depósito en el cual se almacena el carbono.

Los suelos de las tierras áridas han perdido una cantidad importante de carbono y estos tienen un gran potencial de rehabilitación desde el punto de vista del secuestro de carbono, estimado en 12-16 Pg de carbono. Existen vastas áreas de ecosistemas áridos en los países en desarrollo donde el mejoramiento de los sistemas agrícolas podría adicionar carbono a los suelos. Los resultados de los estudios de caso presentados en este informe muestran que existen diferentes prácticas para incrementar el contenido de carbono en los suelos.

Puesto que el secuestro de carbono en si mismo no es una prioridad en los países de menores recursos, las opciones de manejo de la tierra que incrementan el secuestro de carbono y al mismo tiempo mejoran la productividad y previenen la erosión y desertificación son de gran interés en estas regiones. Sin embargo, no es probable que los mecanismos actuales, tales como el MDL, puedan suministrar los fondos necesarios para ello. Aunque los suelos son el principal reservorio terrestre de carbono y se reconoce a la agricultura como una de las causas de emisiones de gases de efecto invernadero, ni las prácticas de manejo de suelos ni las de uso la tierra son elegibles dentro del primer período de compromisos del Protocolo de Kyoto.

Sin embargo, son necesarias inversiones en el secuestro de carbono en las tierras áridas, como áreas menos favorecidas debido a que constituyen el sitio de asentamiento de una gran cantidad de personas de escasos recursos y porque son los guardianes de recursos ambientales importantes que se encuentran en riesgo de degradación o desaparición. Las inversiones en mejor manejo de la tierra para incrementar la fertilidad del suelo y el secuestro de carbono también pueden justificarse, en muchos casos, debido a que constituyen situaciones positivas con mayor productividad agronómica y que contribuyen al crecimiento de la economía nacional, la seguridad alimentaria y la conservación de la biodiversidad.

Incrementar el secuestro de carbono en las tierras áridas degradadas podría tener beneficios ambientales, económicos y sociales para las poblaciones locales. Esta podría incrementar los beneficios de los productores, así como mitigar el calentamiento global, al menos en las próximas décadas, hasta que se desarrollen fuentes alternativas de energía. Por lo tanto, las iniciativas de secuestro de carbono vinculadas con el mejoramiento de los suelos degradados y la productividad de las plantas, y consecuentemente con la seguridad alimentaria y la mitigación de la pobreza en las regiones de tierras áridas, son bienvenidas y se encuentran entre las principales prioridades de la FAO.

Como es improbable que un enfoque puramente de mercado del carbono pueda ser aplicable en los sistemas agrícolas en pequeña escala de los países en desarrollo, será necesaria una estrategia multilateral para la movilización de fondos. El Mecanismo Global de la CCD promueve esa vía multilateral al implementar su mandato de incrementar la efectividad y eficiencia de los recursos financieros existentes y explorar mecanismos nuevos y adicionales de financiación para la implementación de la convención. Esto hace énfasis específico sobre los sistemas agrícolas de las áreas de tierras áridas de los países en desarrollo. Los enfoques multilaterales incluyen fuentes para combatir el cambio climático con los fondos contra la desertificación, los vínculos con medio de vida sostenibles y la provisión de beneficios visibles para los habitantes locales y la movilización de recursos del sector privado.

La CCD, el UNMCC, el CBD y el Protocolo de Kyoto comparten un objetivo común: el manejo adecuado de los suelos, incluyendo el incremento del carbono en el suelo. Por lo tanto, un objetivo importante del programa FAO-GM sobre secuestro de carbono es promover la sinergia entre las convenciones y el sector privado para el establecimiento de un fondo ambiental, especialmente para proyectos de secuestro de carbono en las tierras áridas. Existen oportunidades para las asociaciones bilaterales con las instituciones en los países industriales para iniciar los proyectos de secuestro de carbono que involucran las comunidades locales, también vinculados a las redes globales sobre secuestro de carbono. La FAO entiende que deben realizarse más esfuerzos para explorar y explotar esas oportunidades.

La FAO tomará parte en el diseño y ejecución de programas en tierras áridas de los países tropicales en base a las políticas regionales. También, hará notar a los gobiernos los beneficios que las medidas de secuestro de carbono pueden traer a las comunidades y sociedades agrícolas de las tierras áridas. La FAO podría cumplir también una función importante al proporcionar un soporte institucional seguro para la ejecución de los programas de secuestro de carbono que promueven la colaboración entre los productores locales y los inversionistas.

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INFORMES SOBRE RECURSOS MUNDIALES DE SUELOS

1. Report of the First Meeting of the Advisory Panel on the Soil Map of the World, Rome, 19-23 June 1961 (I)**
2. Report of the First Meeting on Soil Survey, Correlation and Interpretation for Latin America, Rio de Janeiro, Brazil, 28-31 May 1962 (I)**
3. Report of the First Soil Correlation Seminar for Europe, Moscow, USSR, 16-28 July 1962 (I)**
4. Report of the First Soil Correlation Seminar for South and Central Asia, Tashkent, Uzbekistan, USSR, 14 September-2 October 1962 (I)**
5. Report of the Fourth Session of the Working Party on Soil Classification and Survey (Subcommission on Land and Water Use of the European Commission on Agriculture), Lisbon, Portugal, 6-10 March 1963 (I)**
6. Report of the Second Meeting of the Advisory Panel on the Soil Map of the World, Rome, 9-11 July 1963 (I)**
7. Report of the Second Soil Correlation Seminar for Europe, Bucharest, Romania, 29 July-6 August 1963 (I)**
8. Report of the Third Meeting of the Advisory Panel on the Soil Map of the World, Paris, 3 January 1964 (I)**
9. Adequacy of Soil Studies in Paraguay, Bolivia and Peru, November-December 1963.**
10. Report on the Soils of Bolivia, January 1964 (I)**
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12. Preliminary Definition, Legend and Correlation Table for the Soil Map of the World, Rome, August 1964 (I)**
13. Report of the Fourth Meeting of the Advisory Panel on the Soil Map of the World, Rome, 16-21 May 1964 (I)**
14. Report of the Meeting on the Classification and Correlation of Soils from Volcanic Ash, Tokyo, Japan, 11-27 June 1964 (I)**
15. Report of the First Session of the Working Party on Soil Classification, Survey and Soil Resources of the European Commission on Agriculture, Florence, Italy, 1-3 October 1964 (I)**
16. Detailed Legend for the Third Draft on the Soil Map of South America, June 1965 (I)**
17. Report of the First Meeting on Soil Correlation for North America, Mexico, 1-8 February 1965 (I)**
18. The Soil Resources of Latin America, October 1965 (I)**
19. Report of the Third Correlation Seminar for Europe: Bulgaria, Greece, Romania, Turkey, Yugoslavia, 29 August-22 September 1965 (I)**
20. Report of the Meeting of Rapporteurs, Soil Map of Europe (Scale 1:1 000 000) (Working Party on Soil Classification and Survey of the European Commission on Agriculture), Bonn, Federal Republic of Germany, 29 November-3 December 1965 (I)**
21. Report of the Second Meeting on Soil Survey, Correlation and Interpretation for Latin America, Rio de Janeiro, Brazil, 13-16 July 1965 (I)**
22. Report of the Soil Resources Expedition in Western and Central Brazil, 24 June-9 July 1965 (I)**
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25. Report of the Soil Correlation Study Tour in Uruguay, Brazil and Argentina, June-August 1964 (I)**
26. Report of the Meeting on Soil Correlation and Soil Resources Appraisal in India, New Delhi, India, 5-15 April 1965 (I)**
27. Report of the Sixth Session of the Working Party on Soil Classification and Survey of the European Commission on Agriculture, Montpellier, France, 7-11 March 1967 (I)**
28. Report of the Second Meeting on Soil Correlation for North America, Winnipeg-Vancouver, Canada, 25 July-5 August 1966 (I)**
29. Report of the Fifth Meeting of the Advisory Panel on the Soil Map of the World, Moscow, USSR, 20-28 August 1966 (I)**
30. Report of the Meeting of the Soil Correlation Committee for South America, Buenos Aires, Argentina, 12-19 December 1966 (I)**
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41. Soil Survey and Soil Fertility Research in Asia and the Far East, New Delhi, 15-20 February 1971 (I)**
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55. Cinquième réunion du Sous-Comité Ouest et Centre africain de corrélation des sols pour la mise en valeur des terres, Lomé, Togo, 7-12 décembre 1981 (F)
56. Fifth Meeting of the Eastern African Sub-Committee for Soil Correlation and Land Evaluation, Wad Medani, Sudan, 5-10 December 1983 (I)
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58. Sixth Meeting of the Eastern African Sub-Committee for Soil Correlation and Land Evaluation, Maseru, Lesotho, 9-18 October 1985 (I)
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60. Revised Legend, Soil Map of the World, FAO-Unesco-ISRIC, 1988. Reprinted 1990 (I)
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72. Computerized systems of land resources appraisal for agricultural development, 1993 (I)
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74. Global and national soils and terrain digital databases (SOTER), 1993. Rev. 1, 1995 (I)
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Secuestro de carbono en tierras áridas

Esta publicación refleja parte del trabajo de la FAO sobre secuestro de carbono dentro del marco de su programa sobre planificación y manejo integrado de los recursos de tierras para el desarrollo rural sostenible. El informe presenta un análisis completo de los aspectos científicos y el potencial secuestro de carbono en las tierras áridas –algunas de las cuales son las zonas más degradadas y empobrecidas del mundo. El informe está basado en estudios de caso hechos sobre distintas zonas áridas. Incluye una revisión de las políticas y la clarificación de los distintos incentivos económicos relacionados con el secuestro de carbono de modo de determinar en que forma pueden ser usados los recursos disponibles y pueden ser ejecutados programas específicos para mejorar la seguridad alimentaria y los medios de vida en las tierras áridas.

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