

# INDEX

(Note: Pages numbers followed by “n” refer to notes.)

## A

Agricultural Sector Adjustment Loan (ASAL), 94  
Andalas University, 139  
anti-corruption movement, 63  
“authorization letter” system, 27

## B

Bagus’s role, evolution of, 142  
Beji division structure, 221–23  
*bengkok* land, 224–25, 235  
irrigation water supply for, 225  
Berita Acara Pembayaran, 46n92  
BPK audit findings, 25  
British Raj bureaucracy, 11  
“budgetary funds”, 58  
“bureaucratic capitalism,” 48, 73, 73n5  
product of, 71  
bureaucratic clash and agreement, 136–37  
bureaucratic conflicts, re-occurrence of, 151–52  
“bureaucratic expenses,” 58  
bureaucratic fragmentation, 253  
bureaucratic mechanisms, 71  
reproduction of, 57  
bureaucratic patriarchy, 56  
bureaucratic patrimonialism, continuation of, 40n15

bureaucratic polity, concept of, 40n22  
bureaucratic reform, 63–70  
for IMT in Indonesia, final reflections on, 253–56  
within Kimbangwil, 70  
bureaucratic rent-seeking, 25–26, 48, 55–58, 252  
bureaucratic services, 59  
bureaucratization, 242n29  
in Indonesia, 48  
WUA, 234–35

## C

Central Java, 201n3  
civil society movements, 63  
client–service provider relationship, 97  
codependency, cyclical relationship of, 249  
“common property resources”, 2  
community organizer recruitment, 196–99  
consortium counter-alliance, emergence of, 144–51  
consortium members, 160–61  
construction programme, from cost recovery to, 89–92  
“Consultation and Project Coordination”, 26  
Coordinating Minister for Economic Affairs, 127, 133

core policy actors, 49, 63–64, 68, 125  
 re-emergence of, 68–70  
 corruption, 13  
 Corruption Perceptions Index, 13  
 counter-political forces in  
 parliamentary decision making,  
 149–51

## D

decentralization, 16, 42n40  
 decision-making authority, 13, 20, 67,  
 250, 252  
 in systems management, 92  
 transferring, 18  
 decision-making process, 49, 90  
 deconcentration, 16  
 “deferred maintenance culture,” 98  
 despite regional autonomy, 23  
 development blueprint, 12  
 development fund allocation, 27  
 development fund expenditure, 29  
 development fund management, 28  
 Directorate General of Housing,  
 76n51  
 Directorate General of Irrigation, 53,  
 62, 64  
 in Kimpraswil, 70  
 Directorate General of Regional  
 Infrastructure Development,  
 76n51  
 Directorate General of Road  
 Infrastructure, 76n51  
 Directorate General of Rural  
 Development, 64, 76n55, 120n77  
 Directorate General of Spatial  
 Planning and Regional  
 Development, 64  
 Directorate General of Urban  
 Development, 64  
 Directorate General of Water  
 Resources, 70

Directorate General of Water  
 Resources Development  
 (DGWRD), 15, 109, 117n57  
 Directorate of Irrigation and Water  
 Resources (DIWR) of NDPA, 151  
 District Development Planning  
 Agency (DDPA), 184, 233  
 district irrigation agency, 248–50  
 District Water Resources Services  
 (DWRS), 30, 180–81  
 Division of Provincial Irrigation  
 Services (DPIS), 30, 174, 180–81,  
 202n9, 206, 215–18, 248, 250  
 alliances with, 223  
 bureaucratic transformation in, 184  
 Donomulyo irrigation system, 208  
 water distribution in, 216  
 donor-funded policy programme, 90  
 draft Water Act, 125  
 controversial revised clauses in,  
 127–32  
 Kimpraswil’s revision of, 129–32  
 plenary meeting on, 157–59  
 public consultation about, 137–42  
 revised clauses of, 130  
 to Working Committee, 139  
 WUA proposed changes to, 140,  
 141

## E

East Java, PIA-PIP Relationships in,  
 178–79  
 echelon system, 59, 60, 75n36  
 elite–farmer relationship, 230–34  
 FWUA unification an, 232–34  
 taxonomy, 230–32  
 types of, 231

## F

farmer–agency relationship, 80  
 farmer empowerment, 194–95

- farmer-managed irrigation systems (FMIS), 2
- farmers' decision-making authority in systems management, 160
- farmers-irrigation agency relationship, 83
- farmers, WATSAL IMT programme for, 147
- Febri's strategy, 146
- Federation of Water User Associations (FWUAs), 2, 5, 26, 79–82, 185–86, 206, 216–20, 244, 248–50, 254
- dominant alliances in water distribution, 220–23
- downstream, 219
- elite-farmer relationship, 230–34
- formation of, 248
- Kongklangan, 234
- organizational characteristics, 189–90
- organizational development, 194–96, 247–48
- rural elite domination in, 227–30
- staff, 232
- SWUAs' and, 215–20
- unification, 232–34
- upstream, 219
- and WUAs, 227–30, 233
- first Commission IV meeting, 148–51
- Fiscal Decentralization Act Number 25 of 1999, 16, 17, 24
- fiscal dependency, preservation of, 22–24
- foreign loans, 11
- policy reform by, 97–99
- formal decision-making power, 49
- formal policy network for promulgation of Water Act in parliament, 128, 129
- “frames conflict” in Indonesian irrigation policy development, 122
- functional role corruption, 41n25
- fund proposal and allocation, formal procedure in, 34
- funds mobilization, policy tool for, 85–89
- FWUA–WUA organizations, 256
- development, 247
- G**
- Gadjah Mada University, 139
- general purpose grants (DAUs), 18, 22, 44n57
- Golkar political party, 14, 169n33
- members from, 146
- golongan* system, 212, 224, 226, 239n14
- in Kulon Progo District, 212–13
- government fund disbursement, 19
- before and after regional autonomy, 19
- government-managed irrigation systems, 81
- Government of Indonesia (GOI), 93, 161
- and World Bank, agreement between, 107
- government policy-makers, 27
- Government Regulation Number 77 of 2001, 105, 106, 111, 119n68, 125, 133, 137
- on IMT, 102
- Government Regulation Number 23 of 1984 on irrigation, 125
- government's organizational structure, 29–33
- I**
- Implementation Guidance, 53
- IMT. *See* Irrigation Management Transfer (IMT)

- Indonesia
- bureaucratization in, 48
  - characteristic of, 9
  - regional autonomy
    - application of, 22–27
    - concept of, 9
    - and fall of new order government, 16–22
  - as rentier state, 10–12
  - sectoral development, 10
    - project approach and, 27–37
  - state, reformation of, 12–16
  - Suharto's New Order government, 9
    - WATSAL policy-makers in, 252
  - Indonesian bureaucracy, 48
  - Indonesian Consumer Foundation, 75n44
  - Indonesian Forum on Globalization (INFOG), 139
  - Indonesian government, 63, 84
    - irrigation systems, 118n67
  - Indonesian IMT, 78–79
    - implementation of, 107–10
    - legal framework under WATSAL, 101, 102
    - paradigms, researching, 80–83
    - policy, 78–79, 244
      - adoption, 112n7
      - assumptions *vs.* reasons in shaping, 79–80
      - evolution of, 83–93
      - frames in, 122–25
      - making, 83
    - under WATSAL, 93–99
      - organizational structure, 99–101
    - WUA empowerment, strategic positioning of, 101–7
  - Indonesian irrigation agency, 62, 78
  - Indonesian irrigation sector
    - development, 49–50
    - Indonesian political reform of 1998, 47
  - Indonesia Water Resources and Irrigation Reform Program (IWIRIP), 26, 32, 68, 246
  - infrastructure-oriented irrigation development, 48, 61, 62, 247
    - activities, 91
    - irrigation agency and, 49–54
  - infrastructure-oriented programme, 58, 62
  - inter-ministerial decision making, sectoral decision making to, 99–101
  - international donors, 2
  - international epistemic community, 2
  - International Irrigation Management Institute (IIMI), 91, 119n68
  - international policy-makers, 79, 80, 252
  - International Water Management Institute (IWMI), 92
  - inter-sectoral decision-making platform, 67
  - inter-system level water distribution, 250
  - irrigation agency
    - bureaucratic identity, 47–49
    - bureaucratic reform, 63–70
    - rent-seeking rules in project fund management, 58–61
    - and resistance to new policy trends in irrigation, 61–63
    - structural properties of, 49–58
    - financial reporting, 58
    - and infrastructure-oriented development, 49–54
    - organizational structure, regional autonomy and, 20–22
    - relationship between, 251
    - irrigation-based rural development,

- “holistic approach” modelling of, 120n77
- irrigation canals, 210
- Irrigation Committee, 103, 106, 184, 202n11
- Irrigation Development Turnover (IDTO) programme, 91, 109
- Irrigation Improvement Fund, 99
- irrigation management funds, 106
- Irrigation Management Reform, 115n31
- Irrigation Management Transfer (IMT), 1, 2, 12, 68, 92, 102, 214, 243
  - for farmers, meaning of, 248–50
  - implementation of, 107–10, 188
  - and inter-system water distribution, 214–20
  - legal framework under WATSAL, 101, 102
  - paradigms, researching, 80–83
  - paradoxes and future research, 250–53
  - policy, 78–79
    - adoption, 112n7
    - assumptions *vs.* reasons in shaping, 79–80
    - characteristics, 244
    - debates, 178
    - description and analysis of, 124
    - elements, reshaping of, 244–46
    - evolution of, 83–93
    - formulation and implementation, 243
    - GOI’s position on, 162
    - in Indonesia, 72
    - Kimpraswil and MoHA Relationship in, 136–37
    - making of, 83
    - renewal, 3, 122
    - struggles, 125–27
    - timeline of, 134
    - WATSAL, 133, 140
  - provincial governments’ position on, 176–79
  - renewal, 245
  - SDI’s view of, 184
  - WATSAL, 93–99
    - organizational structure, 99–101
    - WUA empowerment, strategic positioning of, 101–7
- Irrigation Management Turnover, 115n31
- Irrigation Operation and Maintenance Project (IOMP) 1987 Statement, 4, 62, 75n41, 79, 83, 84, 89, 90, 93, 96, 108, 111, 125, 176, 200, 214, 243, 249, 251
  - IMT adoption under, 89
  - IMT policy under, 85–89, 110
  - analysis of, 92–93
- irrigation sector
  - development, 12, 57, 61
  - policy change in, 63
- irrigation service fee (ISF), 85, 184
  - collection, 197, 214, 227–28
  - collectors, 247
- Irrigation Sub-Sector Project (ISSP I), 90
- irrigation system—one management, 104
  - principle, 95
- irrigation systems, 223–29
  - for *bangkok* lands, 225
  - Donomulyo, 208
  - Kalibawang, 206, 216, 228–29
  - in Kulon Progo district, 186–87, 206–14
  - majority of, 225
  - management, 85, 119n69, 249
  - management finance, 103
  - Papah, 208–10, 220–21, 233
  - Pekik Jamal, 208–10, 217–18

- Pengasih, 208–10, 217–21, 227–30  
 Penjalin. *See* Penjalin irrigation system  
 run-off-the river, 210  
 Sapon, 206, 210, 219, 227  
 south-east, 208  
 south-west, 208
- J**
- Java Irrigation Improvement and Water Resources Management Project (JIWMP), 91, 176  
 Java Irrigation Improvement and Water Resources Management Project–Irrigation Development Turnover (JIWMP–IDTO), 4, 117n49, 119n77, 126  
 JIWMP–IWIRIP loan, 108, 109, 111  
 joint ministerial decree, 125  
 formulation process of, 111, 132
- K**
- Kabupaten Irrigation Improvement Fund (KIIF), 99, 103–5, 125, 136, 188–89, 255  
 chain of undetectable fund (mis) management, 190–94  
 formulation of, 119n69  
 FWUAs' organizational characteristics, 189–90  
 Kalibawang irrigation system, 206, 216, 228–30, 239n3, 249, 252  
 Kemukus  
 division structure, 215–17, 220, 227  
 irrigation water supply from, 206, 208  
 Kemukus Wudu secondary canal, 217  
 Kimbangwil, 7n18, 12, 64  
 formation of, 63  
 organizational structures of, 15, 64, 66
- Kimpraswil, 12  
 conception of IMT, 122  
 organizational structure, 68–70  
 policy actors, 4  
 public consultation, 138–39  
 revision of draft Water Act, 129–32  
 Kimpraswil-driven Water Act,  
 promulgation process of, 164  
 Kimpraswil froze fund disbursement, 178  
 Kimpraswil Ministerial Decree Number 529 of 2001, 105, 106, 111, 189  
 Kimpraswil–MoHA agreement, 137, 139, 246, 254  
 Kimpraswil moratorium, 132–37  
 Kimpraswil–PDI-P alliance, 152  
 Kimpraswil–PDI-P coalition, 166n29  
 emergence of, 142–44  
 Kimpraswil–PDI-P–P3 coalition, 164  
 Kimpraswil–World Bank relationship, 161–63  
 Kongklangan, FWUAs, 234  
 korupsi, kollusi, nepotisme (KKN), 13  
 Kulon Progo district, 180–88, 239n3, 250  
*golongan* system in, 212–13  
 irrigation agency  
 after regional autonomy,  
 organizational structure of, 181, 183  
 before regional autonomy,  
 organizational structure of, 181, 182  
 irrigation systems in, 206–14
- L**
- large-scale irrigation systems, 160  
 legal procedure of Water Act promulgation, 127, 128

- Letter of Sector Policy (LoSP), 93, 97, 125  
 policy criticisms in, 99
- M**
- medium-scale irrigation systems,  
 development budget for, 143
- Meneg PU, 15, 63, 64, 71, 76n47, 253  
 core policy actors, 68
- Ministry of Agriculture (MoA), 15, 55, 58, 91
- Ministry of Finance (MoF), 22, 30–31, 33, 46n88  
 and sectoral ministries, relationship  
 between, 30
- Ministry of Home Affairs (MoHA),  
 15, 22, 35, 78, 245, 246
- Directorate General of Rural  
 Development (DGRD), 137  
 forum, 139–42
- NewISF programme, 108–10
- Ministry of Public Works (MPW), 4,  
 15, 30, 47, 67, 70, 118n59, 126,  
 181, 244  
 abolition of, 63–68
- Directorate General of Irrigation,  
 organizational chart of, 52
- distribution of project benefits at,  
 60
- organizational structures of, 64, 65
- Ministry of Settlement and Regional  
 Development, 4, 12, 47, 63, 78,  
 253
- organizational structures of, 64, 66
- Ministry of Settlement and Regional  
 Infrastructure, 12, 63, 68, 253
- organizational structure of, 68, 69
- MoHA Ministerial Decree Number 50  
 of 2001, 107
- MPW's Directorate General of  
 Irrigation, 51
- N**
- Nahdlatul Ulama (NU), 139
- National Development Planning  
 Agency (NDPA), 13, 56, 74n26,  
 78, 84, 94, 112n2, 117n57, 174,  
 245
- National Irrigation Administration, 2
- National Strategy to Increase the  
 Level of Wealth in Farming  
 Households, 151
- neo-liberal development perspective,  
 251
- New ISF programme, 108, 109  
 of MoHA, 118n61
- New Order government, 4, 10, 11, 14,  
 29, 37, 42n44, 43n50
- New Order mechanisms, 11
- non-budgetary funds, 58, 59, 71,  
 75n39
- non-budgetary status, 176
- non-governmental organization  
 (NGO), 25, 67, 100, 253  
 representatives, 49, 166n8
- non-technical irrigation systems, 50
- O**
- 101 WATSAL IMT activities, 107
- On-Farm Water Management Project  
 (PTGA), 62  
 officials in, 177–78  
 unit, 201n4
- operation and maintenance (O&M),  
 48, 61, 83  
 budget, 98  
 programmes, 62
- organizational structure of  
 Kimpraswil, 68–70
- P**
- PAN political party, 144
- PAN/Reformasi faction, 153–54

- PAN/Reformasi faction–PKB coalition, 164
- Papah irrigation system, 208–10, 239n3, 249  
 water distribution in, 216, 220–21, 233
- parliamentary decision making, counter-political forces in, 149–51
- parliamentary policy network  
 at first Commission IV meeting, 148  
 at plenary meeting, 159  
 at second Commission IV meeting, 156  
 at working committee level, 145
- parliamentary procedure, 146
- Participatory Irrigation Management, 115n31
- Pekik Jamal irrigation system, 208–10, 217–18, 239n14  
 FWUAs, 224–25, 232, 233
- Pengasih irrigation system, 208–10, 217–21, 227–30, 240n20  
 FWUAs, 225, 232, 233
- Penjalin irrigation system, 208–10, 239n3  
 water distribution in, 216
- People General Assembly, 16, 94, 118n60
- PIA–PIP Relationships in Yogyakarta and East Java, 178–79
- plenary meeting on draft Water Act, 157–59
- policy actors  
 perceptions of IMT, 122, 123  
 in sectoral ministry, 244–46
- policy-makers, 2
- policy reformulation, IMT, 104
- policy renewal, IMT, 105
- political parties, proposed changes to, 154, 155
- political party partisanship system, 13–15, 38, 40n23, 55
- polycentric decision-making processes, 255
- post-New Order era, 11
- post-Suharto Indonesia, 13, 61
- Presidential Instruction Number 3 of 1999, 93, 95
- private sector in water management, 170n47
- priyayi*, 214, 232
- Progo River, 206, 212, 238n1
- Program Guidance, 53
- project activities, 12
- project development approach, 29–37  
 adoption of, 38  
 origin of, 28–29  
 reflection of, 196–99
- project fund management, 33, 35, 36, 61, 178  
 rent-seeking rules in, 58–61
- project management units, 29  
 incorporation of, 21, 53  
 integration of, 24
- project staff. *See* structural staff
- PROSIDA, 50, 58, 70  
 project, implementation of, 53
- Provincial Development Planning Agency, 179
- provincial governments' position on IMT, 176–79
- provincial government structure, overview of, 174, 175
- Provincial Irrigation Agency (PIA), 20, 60, 176, 247  
 authority, 178  
 in East Java, 179  
 interviewees, 177
- Provincial Irrigation Project (PIP) leader, 253
- provincial level project management unit, 32



- Provincial Water Resources Services (PWRS), 20, 175, 176  
structure of, 21
- R**
- Reformasi faction's strategy, 153–56
- regional autonomy, 16–22  
application of, 22–27, 38  
and fall of new order government, 16–22  
prospect of, 26–27
- Regional Autonomy Act Number 22 of 1999, 16, 18, 24, 93, 94, 118n60, 166n16
- regional development plan, 18
- regional governments, 42n42
- rent-seeking rules, 71  
in project fund management, 58–61
- re-occurrence of bureaucratic conflicts, 151–52
- Repelita I–IV, 50, 51
- Ringskog, Klas, 50
- river tributaries, 210
- routine funds, 33
- run-off-the river irrigation systems, 210
- rural elite  
defined, 235  
FWUAs', 227–30  
WUAs', 214, 227–30
- "rural entrepreneurs," 214
- Ryam Rashid, 136
- S**
- Sapon irrigation system, 206, 210, 219, 227, 231, 240n15
- second Commission IV meeting, 153–56, 160–61
- sectoral decision making to inter-ministerial decision making, 99–101
- sectoral development funds, 64, 91, 106, 108, 164
- sectoral ministries, relationship between MoF and, 30
- semi-technical irrigation systems, 50
- Sermo reservoir, 212  
water supply from, 217–18
- small-scale irrigation systems, 91, 92  
management of, 143
- Soekarnoputri, Megawati, 15, 68, 137, 151
- southeast irrigation systems, 208
- southwest irrigation systems, 208
- spatial authority  
application of, 225  
establishment of, 224–27, 250  
in inter-system water distribution, 224–25  
and unequal water distribution, 225–27
- State Audit Agency (BPKP), 14
- State Ministry of Public Works. *See* Meneg PU
- Steering Committee, 100, 101
- step-by-step project procedures, 28
- Stimulant fund management, 189
- Stockholm International Water Institute, 82
- "strategic group", 73n8
- structural staff, 29
- Sub-Directorate of Programme Guidance, organizational chart of, 54
- Sub-Directorate of Rural Irrigation, 64
- Sub-Directorate of Water Resources (SDWR), 124, 138, 254
- Sub-Directorate Program Guidance, 53
- Sub-Division of Irrigation (SDI), 181, 192, 247  
irrigation management to, 185

- water distribution schedule,  
215–19, 232–34
- Suharto's New Order government, 9
- Supreme Audit Agency (BPK), 14
- sustainable irrigation management,  
108
- systematic framework, 188  
for IMT implementation, 196
- systematic rent-seeking practices,  
33–37, 58
- System-level Water Users  
Associations (SWUAs), 5, 248  
federations, 99  
and FWUAs, 215–20, 232–34
- system management, funds for, 106
- T**
- target-oriented IMT implementation,  
194–96
- taxation effect, 39n11
- Technical Guidance, 53
- technical irrigation systems, 50
- ten-day water distribution meetings,  
DPIS, 216–20, 240n16
- third policy element, explanation of,  
97
- Transparency International, 13
- U**
- Ufford, Philip Quarles van, 72
- Upeti* system, 55–58
- Urban Development, 76n55
- W**
- Wahid, Abdurrahman, 12, 15, 68, 95,  
166n9  
anti-corruption movement in, 63
- Water Act, 3, 4, 125, 245–47, 253
- Water Act promulgation procedure,  
127–29, 142
- water channelling path, 218, 219
- water control, concept of, 211
- water distribution, 210  
dominant alliances in, 220–23  
farmers' decision-making authority  
for, IMT, 215–16  
schedule at inter-system level, 211  
in seven technical irrigation  
systems, 220
- Water Resources and Irrigation Sector  
Management Project (WISMP),  
12, 176, 246
- water resources management, 1, 89  
private sector in, 170n47
- Water Sector Adjustment Loan  
(WATSAL), 4, 12, 57, 78, 83, 84,  
214  
agreement, 98  
formulation, 94  
funds disbursement, 251  
organizational structure, 99–101  
policy-makers, 103–7, 110, 111, 196,  
200  
in Indonesia, 252  
strategy, 245, 252, 254, 255  
tool, 245  
policy products, 101
- Water Sector Adjustment Loan IMT  
(WATSAL IMT) programme, 67,  
68, 93, 95–97, 101, 102, 104, 111,  
118n61, 119n74, 135, 139, 141,  
142, 243, 246–49, 251, 253, 254  
budget, 126  
for farmers, 147  
implementation of, 107–9, 174, 177,  
244, 250  
key policy-makers in, 67  
Kimpraswil's withdrawal from, 162  
Kulon Progo district, 180, 184–88  
legal framework, 100  
policy formulation, 244  
policy makers, 124

- policy path in, 161
  - project funds, 178
  - to WISMP, 176
  - water sector corruption, 82
  - water supply, 210
    - irrigation, 223–29
  - Water User Associations (WUAs),
    - 2, 5, 79–82, 92, 93, 96, 103, 105, 116n33, 131, 186, 187, 244
    - bureaucratization, 234–35
    - elite domination in, 234
    - empowerment, 79, 102, 104
    - FWUAs and, 227–30, 233
    - government financial support to, 106
    - leaders, 235
    - organizational development, 90, 107, 236
    - proposed changes to draft Water Act, 141
    - representatives, 148, 170n45
    - rural elite, 214, 227–30
    - Suka Maju, 235
  - WATSAL IMT programme. *See* Water Sector Adjustment Loan IMT (WATSAL IMT) programme
  - WATSAL Task Force (WTF), 100
    - interministerial committee, 127
  - way sectoral development funds, 14
  - Weberian bureaucracy, 48, 59
  - Witoelar, Erna, 63, 67, 118n59
  - Working Committee, 128, 139, 246
    - level, parliamentary policy network at, 145
  - Working Committee in Commission IV, 136, 143
    - members, 165
  - World Bank, 2, 35–37, 44n53, 50, 75n43, 84, 90, 91, 93, 94, 110, 119n77, 161–62, 251
    - agreement between GOI and, 107
    - missions, 36
    - project, 246
    - WATSAL team, 119n68
  - World Bank–funded projects, 12, 71
  - World Water Council, 82
- Y**
- Yogyakarta, 24
    - PIA in, 26
    - PIA-PIP Relationships in, 178–79